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Delivery of care under the Medicare Subvention Demonstration began 1 September 1998, at Madigan Army Medical Center (MAMC). The goal of the demonstration is to implement a cost-neutral alternative to delivering health care to Medicare-eligible military beneficiaries, while increasing the total federal cost to neither the Department of Defense (DOD) nor Department of Health and Human Services. The purpose of this research effort is to determine if MAMC can achieve cost-neutrality and contribute to the achievement of the DOD Level of Effort (LOE). Two supporting objectives are examined in this research effort. The first seeks to determine if the cost of treating Medicare dual-eligible beneficiaries is significantly greater than the cost of treating all other beneficiaries. The second examines whether MAMC will meet its assigned LOE based on accrued costs for care rendered to dual-eligible beneficiaries. Cost-neutrality is achieved if the LOE is met but not exceeded. Results indicate MAMC will meet and exceed its assigned LOE, but will not achieve cost-neutrality. Results also revealed that costs for Medicare patients are greater (significantly). Information and methods presented in this study may assist health care decision-makers in innovating methods for controlling the associated costs.

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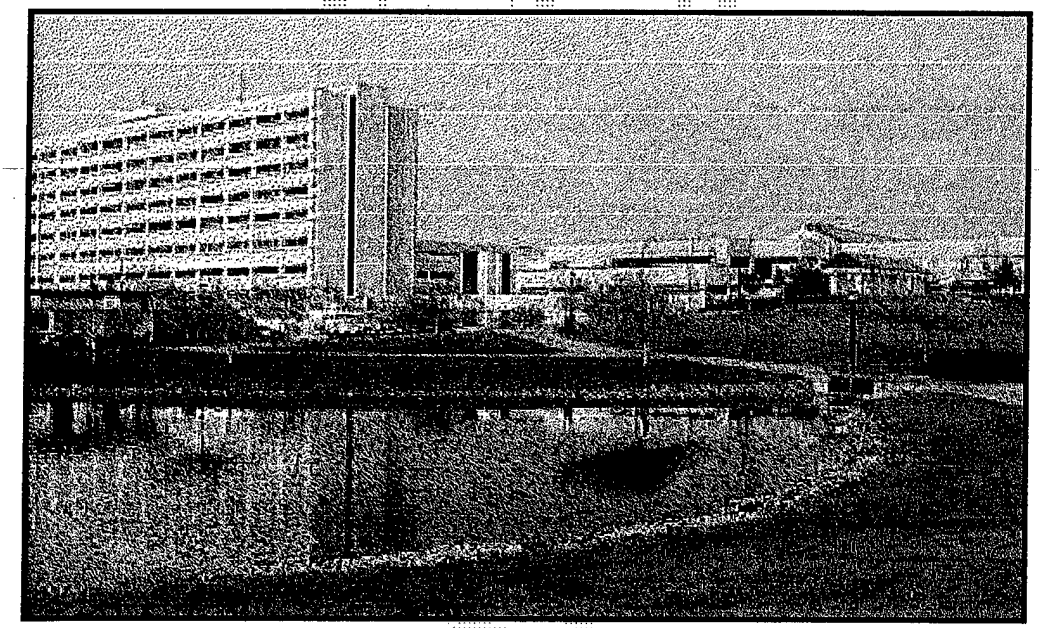

A Graduate Management Project
by
Major William H. Millar, MS, USA, CHE

Madigan Army Medical Center
April 1999

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ABSTRACT

Delivery of care under the Medicare Subvention Demonstration began 1 September 1998 at Madigan Army Medical Center (MAMC). The goal of the demonstration project is to implement a cost-effective alternative to delivering health care to Medicare-eligible military beneficiaries, while increasing the total federal cost to neither Department of Defense (DOD) nor Department of Health and Human Services. Simply, the goal is to achieve cost-neutrality. MAMC is one of the demonstration sites. The purpose of this research effort is to determine if MAMC can achieve cost-neutrality and positively contribute to the achievement of the Level of Effort (LOE). Two supporting objectives are examined in this research effort. The first seeks to determine if the cost of treating Medicare dual-eligible beneficiaries is significantly greater than the cost of treating all other eligible beneficiaries. The second examines whether MAMC will meet its assigned LOE based on accrued costs for care rendered to dual-eligible beneficiaries. Cost-neutrality is achieved if the LOE is met but not exceeded. LOE must be attained if MAMC is to succeed in the demonstration and achieve cost-neutrality. Results of the research indicate MAMC *will* meet and exceed its assigned LOE, but will *not* achieve cost-neutrality. Results also revealed that predictive factors are associated with individual patient cost. Findings support the contention that costs for Medicare patients are significantly greater than those for patients under 65 years of age. MAMC is not expected to achieve success in this demonstration project. The DOD should negotiate a new agreement to address the problems identified in this, and other research efforts. The information and methods presented in this study may assist health care decision-makers in understanding the significance between patient category and patient costs; and empower them with a tool to innovate methods for controlling the associated costs.

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CHAPTER I: INTRODUCTION

Delivery of care under the Tricare Senior Demonstration began at Madigan Army Medical Center (MAMC) on 1 September 1998. The goal of the demonstration project is to implement a cost-effective alternative for delivering accessible and quality care to Medicare-eligible military (dual-eligible) beneficiaries, while not increasing the total federal cost for either Department of Defense (DOD) or Department of Health and Human Services (DHHS) (Moon & Walsh, 1998). More simply stated, the goal is to achieve cost-neutrality. Commonly referred to as "Medicare Subvention," and dubbed the "Tricare Senior Project" by DOD, the demonstration permits a three-year test, during which a limited number of dual-eligible beneficiaries are allowed to enroll in DOD's Tricare Prime Health Maintenance Organization (HMO) plan in six sites around the country. MAMC, in Tacoma, Washington, is one of these demonstration sites. Delivery of care under the Tricare Senior Demonstration began at MAMC on 1 September 1998. The experience and historical data to aid the operations and evaluations of this complex program are not readily available at either the regional or the facility level.

Using MAMC as a case study subject, this study provides an approach to identifying which factors associated with delivering the Tricare Senior Prime benefit have the greatest impact on military Medical Treatment Facilities (MTF), and a method for determining whether cost-neutrality is achievable by those MTFs delivering the Tricare Senior Prime benefit.

Thus, the purpose of this research effort is to determine if MAMC can achieve cost-neutrality under the Tricare Senior Project, and positively contribute to the achievement of the DOD Level of Effort (LOE) established for the Medicare Subvention project. Two supporting objectives will be examined in this research effort. The first seeks to determine if the cost of treating Medicare dual-eligible (65yrs and older) beneficiaries is significantly greater than the

cost of treating Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) eligible (under 65yrs) beneficiaries. The second examines whether MAMC can meet its assigned LOE based on the accrued costs for care rendered to dual-eligible beneficiaries as recorded in existing systems. Cost-neutrality is achieved if the DOD LOE is met but not exceeded.

Conditions Which Prompted The Study

General

The evolution of managed care has brought about significant changes, not only in the way health services are delivered, but in the way that health care is financed. Traditionally, hospitals were expected to provide the greatest volume of care possible and were budgeted on a fee-for-service basis. Under Tricare, the military's managed care program and, in the future, enrollment-based capitation (EBC), military hospitals will receive funds based on the number of personnel enrolled to obtain health services in their facilities. However, hospitals are responsible for the entire continuum of care for its enrollees, even if that care exceeds the EBC rate, and in the case of Medicare beneficiaries, the reimbursement rate DOD and the Health Care Financing Administration (HCFA) negotiate, (a percentage of the Average Annual Per Capita Cost (AAPCC)). Depending on the types of service provided, this could prove a costly venture for MTFs participating in the demonstration.

MTFs have historically provided care to dual-eligible beneficiaries on a space-available basis. HCFA recognizes that MTFs' annual budgets have taken into account the costs of providing care to this population; this is more commonly referred to as the Medicare Level of Effort (LOE) and will be discussed later. Medicare Subvention (or Tricare Senior Project) was introduced as the mechanism to capture the non-budgeted costs of providing care to the Medicare-eligible population. The desired advantages of Medicare Subvention benefit the

Medicare system, the treatment facilities, and most important, the Medicare beneficiaries, who may receive comprehensive care in MTFs. However, the associated costs can be significant. Under Medicare Subvention, it is uncertain if MTFs have a disincentive to treat dual-eligible patients, or if they possess a method to evaluate the financial effects of treating those patients.

The Military Health System (MHS) is under enormous political and economic pressure to reduce "inefficiency" in its MTFs. The driver of this tremendous pressure is the considerable cost of operating military hospitals. According to the General Accounting Office (GAO, 1997), this cost totaled $15 billion in 1997 and represented 6 percent of the total budget allocated to the DOD. By contrast, health care costs in the United States represented 14 percent of the Gross Domestic Product (GDP) for the same period. Although not commonly known, there are many "hidden" costs for the MHS. The cost of operating MTFs includes those "readiness" requirements unique to the military. These requirements, and their associated cost, are non-existent in the civilian healthcare marketplace.

Several of the major factors leading to the heightened political interest in the MHS are the alleged general lack of fiscal accountability of the Defense Health Program (DHP), poor cost accounting, and the general lack of bench-marking exhibited by all armed service health programs. To avoid further deleterious scrutiny, the MHS must perform more accurate cost accounting and develop methods to measure output or performance under the managed care capitation model. The MHS can ill afford to ignore this requirement. To do so invites further congressional inquiry and possibly the dissolution of the MHS.

Today's DOD health care system, the MHS, provides coverage for about 8.2 million people of whom over half are retirees and their dependents and survivors. About 1.3 million military retirees, their dependents, and their survivors aged 65 and older are eligible to receive

care under both the MHS and Medicare benefits (GAO, Sep 1998).

Therefore, Congress directed the DOD and DHHS to develop a joint healthcare program demonstration for military retirees and their family members over the age of 65 following passage of the Balanced Budget Act (BBA) of 1997 (Moon & Walsh, 1998). Subsequently, DHHS's Health Care Financing Administration (HCFA), the DOD and the Office of the Assistant Secretary of Defense (Health Affairs) (OASD(HA)) signed a memorandum of agreement to conduct a demonstration project under which the DHHS will treat the MHS similarly to a Medicare risk-type HMO for healthcare services provided to dual-eligible beneficiaries at designated MTFs or through contracts (Cohen, DeParle, Martin and Shalala, 1998). The Office of Management and Budget (OMB) and the General Accounting Office (GAO) will evaluate the project each year of the demonstration (Moon & Walsh, 1998).

Medicare Subvention is generally viewed with great enthusiasm by senior military medical leadership. A common misperception is that this legislation will finally allow MTFs to recover costs for treating Medicare eligible military beneficiaries. The reality is that the MHS must meet a workload (known as LOE) historically built into the funding base before any additional funds are transferred to the DOD from HCFA. A confounding factor, however, is the recent decrements in the DOD, and thus the Defense Health Program (DHP), budget.

An interesting paradox is that while out-patient access remains a significant problem for active duty and their dependents, senior MHS officials note that additional space-available care may be opened to increase access to more dual-eligible beneficiaries. Additionally, the enrolled dual-eligible beneficiary will represent a 'fully covered life'. That is, all allowable and approved healthcare costs for the enrolled dual-eligible beneficiary are covered. Additionally, dual-eligible beneficiaries may not be turned away or 'shifted' to other HCFA-paid Medicare plans.

Problem Statement

It is uncertain, under Medicare Subvention (and in the future, under EBC), if military medical treatment facilities have a disincentive to treat dual-eligible patients, or if there is a method available to adequately evaluate the financial effects of treating those same patients. While other studies have examined the impact of other variables on individual patient costs and lengths of stay, none have either specifically identified which factors associated with delivering the Tricare Senior Prime benefit will have the greatest impact on MTFs or determined whether cost-neutrality is achievable. The potential impact of the project on MTFs has not been fully measured or evaluated, hampered primarily by data quality concerns (GAO, Sep 1998).

Delivery of care under the Tricare Senior Demonstration began at MAMC on 1 September 1998. The experience and historical data to aid the operations and evaluations of this complex program are not readily available at either the regional or the facility level. Can MAMC achieve cost-neutrality and contribute to the program's success? Does MAMC have a disincentive to treat dual-eligible beneficiaries? Does it cost more to provide care to dual-eligible beneficiaries? Are there departments or service lines that require more stringent management strategies in order to realize program success? Although these questions are better answered prior to implementation of such a complex project as Medicare Subvention, the results of an investigation of the Tricare Senior initiative may provide decision-makers and administrators a method to identify program elements needing adjustment, improvement or overhaul.

Using MAMC as a case study subject, this study provides an approach to identifying which factors associated with delivering the Tricare Senior Prime benefit have the greatest impact on MTFs, and a method for determining whether cost-neutrality is achievable by those MTFs delivering the Tricare Senior Prime benefit.

Literature Review

Before disclosing specifics of the agreement and examining whether cost-neutrality is achievable, it is important to first understand the history of the Medicare program, the MHS, and the events culminating in this memorandum of agreement between the DOD and DHHS.

Medicare

Beginning in 1915, various efforts to establish government health insurance programs have been initiated. From the 1930's on, there was broad agreement on the real need for some form of health insurance to alleviate the unpredictable and uneven incidence of medical costs. Efforts to include a health insurance program in the original 1935 Social Security Act were dropped by President Roosevelt because he feared strong physician opposition would jeopardize the entire program (Brecher, 1995). Various national health insurance plans, financed by payroll taxes, were proposed in Congress starting in the 1940's; however, none were ever brought to a vote (Social Security Bulletin, 1993). Post World War II efforts to add national health insurance to the nation's social security system by President Truman led to a large-scale, well-funded campaign against it by the American Medical Association and various business organizations. The victory of a Republican in the 1952 presidential election led to an 8-year period of little action or prospect for change in federal health care policy. (Brecher, 1995).

The presidential election of 1960 saw a revival of interest in federal efforts. This time the Democrats, supported by labor organizations, advocated hospital insurance for the elderly only, rather than immediate enactment of a universal system. The Democratic presidential candidate won, but the legislation that emerged from Congress reflected major compromises with more conservative legislative leaders. The Kerr-Mills act of 1961 established a program to pay for the medical expenses of the poor elderly that was closely linked to joint state-federal welfare

programs rather than a broader program linked to federal Social Security (Brecher, 1995).

The landslide victory of the Democrats in the 1964 national elections made the passage of broader legislation possible (Brecher, 1995). A more comprehensive improvement in the provision of medical care, particularly for the elderly, became a major Congressional priority (Social Security Bulletin, 1993). After various considerations and approaches, and after lengthy national debate, Congress passed legislation in 1965, which established the Medicare and Medicaid programs as Title XVIII and Title XIX of the Social Security Act. Medicare was established in response to the specific medical care needs of the elderly, while Medicaid was established in response to the widely perceived inadequacy of the "welfare medical care" under public assistance (Social Security Bulletin, 1993).

Title XVIII of the Social Security Act, entitled "Health Insurance for the Aged and Disabled," is commonly known as Medicare. When first established in 1966, Medicare covered most persons age 65 and older. In 1973, legislation added other groups: (a) persons who are entitled to disability benefits for 24 months or more; (b) persons with end-stage renal disease (ESRD) requiring dialysis or kidney transplant; and (c) certain otherwise non-covered persons who elect to "buy into" Medicare (Waid, 1998).

Medicare consists of two primary parts: hospital insurance (HI), also known as Part A; and supplementary medical insurance (SMI), also known as Part B. When Medicare began on 1 July 1966, there were 19.1 million persons enrolled in the program. By the end of 1966, 3.7 million persons had received as least some health care services covered by Medicare. A third part of Medicare, sometimes known as "Part C," is the Medicare+Choice program. Established by the Balanced Budget Act of 1997 (Public Law 105-33), Medicare+Choice became affective on 1 January 1998. Beneficiaries must, however, have Medicare Part A and Part B in order to enroll

in a Part C plan. In 1997, about 38 million persons were enrolled in one or both of parts A and B of the Medicare program. About 87 percent of all Medicare "enrollees" used some HI and/or SMI service in 1997 (Waid, 1998).

From the mid-1970's to 1992, federal efforts focused on controlling the rising cost of Medicare and Medicaid rather than expanding their scope. This shift was first evident in 1972 with the creation of utilization review organizations. The Federal Health Maintenance Organization Act of 1973 sought to promote these organizations because they were viewed as cost-saving delivery mechanisms (Brecher, 1995).

Managed Care and Medicare

The triumph of conservative Republicans in the 1980 national elections and the reelection of President Reagan in 1984, energized efforts to curb spending under Medicare and Medicaid as well as virtually all other forms of domestic federal policy (Brecher, 1995).

In 1982, with the passage of the Tax Equity and Fiscal Responsibility Act (TEFRA), Congress mandated the provision of managed care plan options to Medicare beneficiaries. The statute allows Medicare beneficiaries to enroll in risk or cost contract HMOs or Competitive Medical Plans (CMPs) which offer a limited benefit plan. The plans contract with Medicare's administrative agency, HCFA, to provide Medicare benefits. In exchange for their participation, the plans receive a capitated payment, the AAPCC, to cover the cost of care to beneficiaries. The structure provides incentives for plans to minimize utilization of services (Edson, 1996).

The AAPCC is calculated as the basis for the capitation of an enrolled beneficiary. The AAPCC is defined as the estimated amount that Medicare would have paid in a geographic area if HMO enrollees had received services in the fee-for-service sector, (refer to Appendix B-1 for the AAPCC rates for Counties in Washington State). HCFA calculates the AAPCC by: (a)

projecting the United States Per Capita Costs (USPCC) for services rendered to Medicare beneficiaries, (see Appendix C-1); (b) adjusting the USPCC to county level historical cost data (with the exception of end-stage renal disease, for which costs are calculated on a state level); (c) converting costs to a fee-for-service basis by removing Medicare HMO beneficiaries; and (d) recalculating the county per capita cost adjusting for demographic variables (age, gender, institutional status, and Medicaid status). Medicare then pays 95 percent of the AAPCC rate to a Medicare HMO for each beneficiary enrolled by county of residence (HCFA, 1995).

To obtain a TEFRA Medicare contract, a plan must either be a federally qualified HMO or designated by the HCFA as a CMP. The HMO or CMP must meet TEFRA requirements in a range of issues including membership, medical services, enrollment, marketing, administrative ability and quality assurance. The Omnibus Budget Reconciliation Acts (OBRA) of 1985, 1987 and 1990 further defined the rules and regulations governing Medicare HMOs (Zarabozo and LeMasurier, 1995).

Since 1992, the number of Medicare beneficiaries enrolled in managed care plans has experienced unprecedented growth. HCFA is the largest purchaser of managed care in the country, accounting for about 19 million Americans. As a result, HCFA is taking new steps to protect beneficiaries in managed care. These steps include banning "gag clauses" on what physicians can say to patients about treatment options, requiring member satisfaction surveys and measurement of health plan performance, and limiting financial incentives for physicians so that efforts to control costs do not curtail needed care (HCFA, 1998).

The Administration has worked to expand choices for Medicare beneficiaries and to ensure that all beneficiaries enrolled in managed care receive quality care. As part of his seven-year balanced budget proposal, President Clinton seeks to further expand the availability of managed

care to Medicare beneficiaries by increasing the number of Medicare options available. The recent announcement that the Federal Employees Health Benefit Plan (FEHBP) will open enrollment on 1 January 2000, to dual-eligible beneficiaries in its own Medicare Subvention demonstration is an example of this effort to increase choice (Philpott, 1998).

As of February 1998, in excess of 6 million Medicare beneficiaries were enrolled in a total of 427 managed care plans, accounting for nearly 16 percent of the total Medicare population. This represents a 156 percent increase in managed care enrollment since 1992. More than 80,000 Medicare beneficiaries are voluntarily enrolling in risk-bearing HMOs each month. Since 1992, enrollment in risk plans has more than tripled to 5.3 million. Presently, 88 percent of Medicare beneficiaries are enrolled in managed care risk-bearing plans. As of 20 February 1998, risk plans made up 322 of the 427 managed care plans participating in Medicare (HCFA, 1998).

HCFA recently launched "Medicare Choices," a demonstration project designed to allow beneficiaries to join a greater variety of managed care plans, including provider sponsored organizations (PSOs) and preferred provider organizations (PPOs). This project will also experiment with alternative payment methods such as partial-capitation, risk adjustment, and competitive bidding. Another goal of this project is to increase access to Medicare managed care organizations in rural communities (HCFA, 1998).

Military Health System and Managed Health Care

The medical mission of the DOD is to provide medical services and support to the armed forces during military operations, and to provide medical services and support to members of the armed forces, their family members and others entitled to DOD medical care (Tricare Final Rule, 1995). The idea to provide military medical care to the families of active duty members of the uniform services dates back to the late 1700s. In 1884, Congress directed that "medical officers

of the Army and contract surgeons shall, whenever possible, attend to the families of the officers and soldiers free of charge" (OCHAMPUS Fact Sheet 1, 1995).

There was very little change until World War II. Most draftees were young men who had wives of child-bearing age. The military medical care system, which was on a wartime footing, could handle neither the large number of births, nor care for the very young children. In 1943, Congress authorized the Emergency Maternal and Infant Care Program (EMIC). EMIC provided for maternity care and the care of infants up to one year of age for spouses and children of service members in the lower four pay grades. It was administered by the "Children's Bureau" through state health departments (OCHAMPUS Fact Sheet 1, 1995).

The Korean conflict again strained the capabilities of the military health system. In 1956, the Dependents Medical Care Act was signed into law, effective December 7, 1956. The 1966 amendments to this act created the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS). The CHAMPUS program became effective October 1, 1966. Retirees, their family members, and certain surviving family members were enrolled in the program on 1 January, 1967 (OCHAMPUS Fact Sheet 1, 1995).

The CHAMPUS program is a federal medical benefit program that cost shares charges for medically necessary services and supplies required in the diagnosis or treatment of and illness or injury. Congress provides the funding and benefits for this program. Medicare eligible military beneficiaries, who lose CHAMPUS eligibility when they attain Medicare eligibility, are also eligible for care in the direct system on a space-available basis, and can be reimbursed for civilian care under the Medicare program. The majority of care for military beneficiaries is provided within catchment areas of MTFs; a catchment area being roughly defined as the area within a 40-mile radius around an MTF and further defined by zip codes within the catchment

area (Tricare Final Rule, 1995).

A significant factor that intensified the political scrutiny placed on the MHS was the massive growth of CHAMPUS. CHAMPUS, through a lack of demand management, became a perverse system of military healthcare financing that confounded efforts to control cost growth, created issues concerning military physician quality and pay, and did not hold the armed services accountable for their own cost-shifting behavior until 1988 (Braendel, 1990).

During the mid and late 1980s the medical departments of the armed services successfully sought to gain additional resources to assist in recapturing CHAMPUS workload to provide cost savings to the government. Additional resources were provided and physician bonus pay was increased. Yet, CHAMPUS costs continued to grow at an increasing rate. Compounding this demand for additional resources, "to save CHAMPUS expenditures," was the continued cost shifting of CHAMPUS and Medicare eligible care out of the MTFs at no penalty. Braendel (1990) notes that the DOD paid the CHAMPUS bill in total until 1987. At each fiscal year-end close, the Secretary of Defense was forced to regularly return to Congress with a request for additional funds to meet the unpaid, outstanding CHAMPUS bills (Braendel, 1990). Two important changes occurred during 1988 that provided sufficient motivation for DOD's request that the DHP execute better fiscal accountability. Congress directed that the individual services be responsible for their own CHAMPUS expenditures, and CHAMPUS payments made to hospitals were changed from billed charges to diagnostic related groups (DRGs).

The MHS formerly used a workload-based method of funding described by Braendel (1990) as the Medical Care Composite Unit (MCCU). The MHS is currently using a modified form of capitation funding designed and implemented by Braendel during Fiscal Year (FY) 1992. This has brought about better overall fiscal accountability. In the local settings, inappropriate

admissions and excess lengths of stay have been largely eliminated. This indicates that physician behavior has been modified to some extent. Some MTFs have successfully reaped savings from the physician behavior changes. Many hospitals have closed in-patient wards and some have significantly reduced nursing staff. However, despite the push towards 'managed care,' most MTFs have not invested in additional primary care assets. Out-patient access is still a significant problem for the MHS.

The GAO issued a recent (21 February 1997) report on the Defense Health Program (DHP). The report indicates that the OASD(HA) Program Objective Memorandum (POM) overestimated utilization management (UM) savings, and did not factor-in increased operating costs for new technology and medical intensity. The GAO estimate for the required medical reprogramming is $8.4 billion from FY1998 to FY2003 (GAO, 1997).

Recently DOD embarked on a new program, called Tricare, which is intended to improve the quality, cost and accessibility of healthcare services to its beneficiaries. Because of the size and complexity of the MHS, Tricare implementation is being phased in over a period of several years. The principal mechanisms for the implementation of Tricare are the designation of commanders of selected MTFs as Lead Agents for 12 Tricare regions across the country, operational enhancements to the MHS, and the procurement of managed care support contracts for the provision of civilian health care services within those regions. Lead Agents are the senior officer (commander) of a MHS Medical Center responsible for the establishment and coordination of accountable health service plans on a regional basis. Under the Tricare health care enrollment structure, all health beneficiaries become participants in Tricare and are classified into one of four categories:

1. Active duty members, all of whom are automatically enrolled in Tricare Prime, an HMO-type option;
2. Tricare Prime enrollees, who (except for active duty members) must be CHAMPUS eligible;
3. Tricare Standard and Tricare Extra participants, which includes all CHAMPUS-eligible DOD beneficiaries who do not enroll in Tricare Prime; or
4. Medicare-eligible beneficiaries and other non-CHAMPUS-eligible DOD beneficiaries, who, although not eligible for Tricare Prime, may participate in many features of Tricare. These other features are outlined in the Tricare Final Rule and Section 32, part 199 of the Code of Federal Regulations (32 CFR Part 199) (Tricare Final Rule, 1995).

Medicare Subvention

General

DOD named the Medicare Subvention demonstration the "Tricare Senior Program." As directed by the Balanced Budget Act of 1997 (BBA), the program has two components. The first, called Tricare Senior Prime, is a risk-bearing Medicare HMO. The second component is called "Medicare+Partners." Under this program element, selected DOD sites will serve as preferred providers for commercial HMOs, performing healthcare services for dual-eligible beneficiaries that are members of approved commercial HMOs and receiving reimbursement from the HMO for those services (Moon and Walsh, 1998).

Medicare-eligible beneficiaries lose their CHAMPUS eligibility when they attain Medicare eligibility, and only CHAMPUS eligible individuals are eligible for the Tricare Prime program. Medicare-eligible beneficiaries are still eligible for space-available care at MTFs. However, as

more beneficiaries enroll in Tricare Prime, there is less space available at MTFs. Military retirees feel they are effectively being "locked-out" of the MHS (TROA, 1996).

Origin

Effective lobbying efforts by the Military Coalition, a collection of 23 military organizations, resulted in various legislative initiatives in 1995 and 1996 to provide a solution to the "lock-out" problem. Senator Phil Gramm (R-TX) introduced Senate Bill 1487 on 20 December 1995. This bill proposed establishment of a demonstration project that provides for the reimbursement of the DOD by Medicare for health care provided to certain dual-eligible beneficiaries. The bill was cited as the 'Uniformed Services Medicare Subvention Demonstration Project Act' (S. 1487, 1995).

Representative Joel Hefley (R-CO) introduced House Resolution (H.R.) 580 on 19 January 1996. This bill proposed amending title XVIII of the Social Security Act and Title 10 of the United States Code; allowing the Secretary of Health and Human Services to reimburse the MHS for care provided to Medicare-eligible military retirees and their spouses (H.R. 580 1996).

These initial legislative proposals were reworked by various legislative committees. More specifically defined legislation was reintroduced on March 21, 1996. Senator Robert Dole introduced Senate Bill 1639, Representative Hefley introduced H.R. 3142, and Representative J.C. Watts (R-OK) introduced H.R. 3151. There were now two legislative forms of a Medicare Subvention demonstration proposed by Congress. The Gramm (S.1487 1995)/Hefley (H.R.3142 1996) and Dole (S.1639 1996) /Watts(H.R.3151 1996) bills were very similar pieces of legislation. However, preparation of a Memorandum of Agreement by DOD and DHHS was required before final legislation could be prepared and enacted as part of the Fiscal Year 1997 Defense Authorization Act.

Both versions of proposed legislation required implementation of a Medicare Subvention Demonstration Project in two of DOD's 12 regions, and assessment by an independent evaluator. DOD chose Regions 6 and 11. Region 6 includes Arkansas, Oklahoma, parts of Louisiana, and most of Texas. This region is home to approximately 11.5 percent of the entire 1996 population eligible for Tricare. Two medical centers and eleven community hospitals are located within Region 6. The Lead Agency for Region 6 is located at Wilford Hall Air Force Medical Center, Lackland Air Force Base (AFB) in San Antonio, TX. Region 11 includes Washington, Oregon and a small portion of Idaho near Spokane, Washington, and is home to approximately 4.2 percent of the nation's Medicare-eligible population. One medical center and three community hospitals are located within Region 11. The Lead Agency for Region 11 is at Madigan Army Medical Center, located near Tacoma, Washington (733 Update Report 1996).

The DOD contracted with United HealthCare to evaluate the feasibility of the Medicare Subvention Demonstration Project and prepare a modeling and impact study. The study documented the advantages DOD possesses as it prepares to emulate civilian risk-bearing Medicare HMOs, and identified an array of potential obstacles to program success. The "DOD Medicare Modeling and Impact Study," prepared on 26 July 1996, highlighted numerous weaknesses DOD must overcome to successfully implement and operate Tricare Senior Prime and Medicare Partners. United HealthCare concluded that, "the demonstration is probably not financially feasible in Seattle and only marginally feasible in San Antonio, due to low AAPCC rates," (United HealthCare, 1996).

A Memorandum of Agreement titled "Medicare Demonstration of Military Managed Care" was signed on 6 September 1996 by William Perry, Secretary of Defense; Donna Shalala, Secretary of Health and Human Services; Steven Joseph, Assistant Secretary of Defense (Health

Affairs); and Bruce Vladeck, Administrator, HCFA (Joseph, Perry, Shalala and Vladeck, 1996). President Clinton announced the "Medicare Demonstration of Military Managed Care" on 10 September 1996. Pending final legislation from Congress, the demonstration was scheduled for implementation on 1 January 1997 (News Release, 1996).

Republican Congressional leaders met 27 September 1996 with chairpersons of every committee having jurisdiction over the military or Medicare, and agreed to support a Medicare Subvention test. Three days later, however, when proponents tried to insert the plan into the omnibus appropriations bill, Representative William Thomas (R-CA) blocked the move. Thomas chairs the House Ways and Means subcommittee on health, which has oversight responsibility for Medicare (Philpott, 1996). Thomas was likely influenced by a Congressional Budget Office memorandum dated 19 September 1996, which stated the demonstration project would increase Medicare costs by $80 million over four years (F-D-C Reports, 1996).

The Memorandum of Agreement was to operate under the authority of new legislation reflecting the terms of the agreement (Joseph, Perry, Shalala and Vladeck, 1996). However, Dr. Joseph, the former Assistant Secretary of Defense for Health Affairs, was emphatic that it was not the time to suspend efforts but to push as far as possible without the legislative support for the demonstration. According to Mr. John Casciotti, the DOD Health Affairs legal advisor, Health Affairs and the MHS could perform the demonstration without legislation. Dual-eligible beneficiaries may be enrolled in Tricare as part of the Medicare Demonstration of Military Managed Care. Dr. Martin, the Principal Deputy Assistant Secretary of Defense (Health Affairs) pointed out that the signed agreement between HCFA and DOD demonstrated that the MHS could operate as a Medicare HMO (Broyles, 1996). Representative Hefley stated that he would reintroduce Medicare Subvention in Congress in 1997 (Philpott, 1996).

Embedded in the BBA of 1997, Medicare Subvention legislation passed into law. The demonstration is authorized under the authority of Section 1896 of the Social Security Act, as added by section 4015 of the BBA of 1997 (P.L. 105-33) (Cohen, DeParle, Martin and Shalala, 1998). The demonstration was authorized to begin on 1 January 1998, and operate through 31 December 2000. However, due to lengthy DOD and HCFA negotiations on the demonstration's structure and reimbursement methods and delays in certifying DOD demonstration sites as Medicare risk plans, the demonstration did not begin until July 1998 (GAO, Sep 1998). MAMC began enrolling beneficiaries on 15 July 1998. To date, 3,300 beneficiaries have enrolled at MAMC, filling its capacity. The balance of MAMC's capacity is maintained for services rendered to Active Duty personnel and their families, and retired military personnel and their families under age 65. Health care delivery began on 1 September 1998 (Hober, 1998). Additionally, an updated Memorandum of Agreement was signed in 1998 by William Cohen, Secretary of Defense; Donna Shalala, Secretary of Health and Human Services; Edward Martin, Assistant Secretary of Defense (Health Affairs); and Nancy-Ann Min DeParle, Administrator, HCFA reflecting the new terms of the agreement (Cohen, DeParle, Martin and Shalala, 1998).

The Medicare Subvention Project (Tricare Senior Project) entitles dual-eligible beneficiaries to both Medicare and MHS healthcare benefits, whichever is greater. Medicare benefits include Skilled Nursing Facility, Home Hospice, and Home Heath Care. The MHS is more familiar with providing acute rather than chronic care. Among the health care benefits the MHS provides that Medicare does not, is the pharmacy benefit. This benefit is most in demand by military and dual-eligible beneficiaries. The MHS provides prescription drug benefits through three programs: (a) MTF out-patient pharmacies; (b) Tricare contractors' retail pharmacies; and (c) a national contractors' mail-order service. As in the private sector, DOD's

pharmacy costs have continued to grow relative to total health care costs. GAO estimates that DOD pharmacy costs increased 13 percent between 1995 and 1997, while overall health care costs increased two percent for the same period (GAO, Jun 1998). Although there are a number of adjustments to the reimbursement rates HCFA will potentially pay the DOD, there is currently no adjustment for the costs associated with the pharmacy benefit.

Level of Effort (LOE)

A key aspect to the agreement between DOD and DHHS is the concept of Level of Effort (LOE). Under the agreement, DOD and HCFA agreed to use 1996 as the base-line year for historical LOE spending. Thus, the LOE is literally the FY96 expenses for "Medicare covered services" provided to dual-eligible beneficiaries who reside in a participating site Medicare service area, (Cohen, DeParle, Martin and Shalala, 1998).

The Congressional Budget Office (CBO) emphasizes the importance of an accurate LOE for ensuring the Medicare subvention demonstration's cost-neutrality. In February and September 1996 cost estimate memoranda on Medicare subvention demonstration bills, the CBO stated that, excess Medicare payments would result in deficit spending because, "DOD is funded with discretionary money and Medicare Trust Fund moneys are mandatory," (GAO, Sep 1998).

According to the GAO (Sep 1998), the DOD's LOE baseline, which is key to ensuring the demonstration's cost-neutrality, "...is inaccurate and may be understated because of weaknesses in its source data and methodology." Although the data and methodological weaknesses, "...appear to cause an understatement of LOE and raise the possibility of erroneous Medicare payments, the actual magnitude of LOE error is not readily determinable" (GAO, Sep 1998).

The Medicare Demonstration of Military Managed Care Memorandum of Agreement, Attachments C and D provide further explanation of the reimbursement and LOE methodologies.

DOD: Medicare Subvention Advantages

Retiree Access Increased

As discussed earlier, space-available care for retirees at military MTFs is disappearing as enrollment of other beneficiaries in TRICARE Prime increases. Retirees feel they have been promised healthcare for life by the military, and demand access to military MTFs. Prior to 1956, the statutory authority to provide health care to retirees and dependents was not clear. The Dependents' Medical Care Act of 1956 described and defined retiree/dependent eligibility for health care at military facilities as being on a space-available basis. Authority was also provided to care for retirees and their dependents at these facilities (without entitlement) on a space available basis. The legislation also authorized the imposition of charges for out-patient care for such dependents as determined by the Secretary of Defense (Burelli, 1991).

Although no authority for entitlements was extended to retirees and their dependents, the availability was almost assured at that time given the small number of such beneficiaries. Therefore, while not legally authorized, for many people the "promise" of "free" health care "for life" was functionally true. This "promise" was, and continues to be, a useful recruiting and retention tool, (Burelli, 1991).

Retiree groups, such as The Retired Officers Association (TROA), feel that "the government has an obligation to fulfill the long-standing health care commitments that have been made to service members to help persuade them to accept the demands and sacrifices inherent in arduous careers in uniformed service" (TROA, 1996). Dr. Stephen Joseph, Assistant Secretary of Defense (Health Affairs), testified before Congress in 1995, that DOD has an "implied moral commitment" to provide health care to all eligible beneficiaries (TROA, 1996). Dr. Joseph called the demonstration project "a giant step in the right direction for us (DOD) to be able to

care for our older beneficiaries (HA News Release, 1996).

Cost Avoidance

Proponents believe Medicare subvention can save HCFA money. Some of the earliest data on HMOs come from the massive RAND Health Insurance Experiment, launched in 1971. Although HMOs represented only a tiny segment of the health care market at the time, they were beginning to attract notice, and so one large, well-established HMO was included in the study. The major finding – that large, staff-model HMOs are able to control costs and still provide care as well as health care organizations in the fee-for-service system – maintains its accepted validity (RAND, 1995).

For example, health expenditures in California, the state with the largest enrolled managed care population (85 percent of the state's insured population), have grown at a dramatically slower rate than those in the country at large. This is not only true with overall costs, but with every major category of health care spending. Spending on hospital services has grown by 27 percent in the last decade, exactly half of the national average of 54 percent. Money paid to physicians increased by 58 percent in California, while national spending on doctors went up 82 percent. Spending on pharmaceuticals went up 41 percent in California compared to 65 percent across the country (RAND, 1995).

Finally, DOD's "Section 733 Study of the Military Medical Care System," released in May 1994, found that military care is actually up to 24 percent less expensive than civilian care. Proponents of Medicare subvention argue that if the military managed care environment can provide care at a better cost than a civilian care and increase access for retirees, then why would HCFA not fully embrace Medicare Subvention?

Increased Quality and Satisfaction

Medicare Subvention proponents point to additional indicators of quality and satisfaction in managed care plans to support the demonstration project. A Health Insurance Reform Project at George Washington University found that although growth in Medicare managed care plans has not kept pace with the private fee-for-service sector, seniors who are already enrolled in managed care plans are happy with them. A recent American Viewpoint survey shows only 2 percent of Blue Cross and Blue Shield Medicare HMO members switch back to fee-for-service, even though they have the option of switching every month. Moreover, the survey demonstrates that even Medicare beneficiaries with chronic and serious medical conditions, such as cancer, kidney disease and pulmonary disease, prefer HMOs over traditional Medicare. The poll found, by a three-to-one margin, seniors cite (a) reduced paperwork, (b) lower out-of-pocket costs and (c) expanded benefits, as tremendous advantages of HMOs over the traditional Medicare program (Etheredge, 1996).

While satisfaction issues are important, they are simply a perception of quality. HCFA contracted with the RAND corporation to evaluate Medicare HMO's effect on quality of care for the elderly. The RAND research team found that "although some patients were being discharged before they were stable, the majority received good care and came to no harm as a consequence of shorter hospitalizations." RAND concluded that "cost-cutting is not necessarily the enemy of quality. It is possible to have both, provided that the adverse effects of the cost-savings are identified early and ways are found to ameliorate them" (RAND, 1995).

Equity for Retirees

Retiree groups are outraged with the treatment by their government. TROA claims that "DOD is almost the only very large employer that does not provide heavily subsidized

supplemental health care benefits to its retired Medicare-eligible employees. As the largest single employer in America, DOD cannot be compared to the small and medium-sized firms that often scrimp on health care costs. Compared to the top five corporations in America – General Motors, Ford, Exxon, IBM and General Electric – DOD gives its retirees short medical shrift, indeed. All of these firms pay nearly all of their retirees' Medicare supplemental premiums, cap retirees' out-of-pocket medical expenses at modest levels, or both. All of them provide highly subsidized prescription drug coverage, four provide dental coverage, and three provide vision coverage" (TROA, 1996).

TROA also asks, "how can the government possibly claim that it cannot afford to provide these subsidized benefits to retired uniformed service members when it provides the identical coverage without a complaint to other retired government employees?" (through the Federal Employees Health Benefits Plan (FEHBP))." Finally, TROA asks "if these same benefits are funded for every retired Federal civilian, every retired Congressional staffer, and every retired Member of Congress, how can anyone convincingly assert that there is no room left at the health care table for the retired service member who contributed decades of service and sacrifice to preserve the collective national well-being?" (TROA, 1996).

Other Initiatives

Proponents of Medicare Subvention emphasize that a demonstration project with an independent evaluation will help both HCFA and DOD realize the potential benefits and drawbacks of subvention. HCFA has admittedly experienced problems with the current Medicare HMO payment methodologies. Last year, HCFA announced "Medicare Choices," a demonstration project designed to expand the types of managed care plans available to Medicare beneficiaries and to test different payment methodologies. HCFA invited a wide variety of

managed care organizations to participate in this demonstration, including PPOs, HMOs and integrated delivery systems (IDS). HCFA targeted eight geographic areas for the demonstration (Vladeck, 1995).

The outcome of innovative payment arrangements between Medicare and the networks is of particular interest in these demonstration projects. If these projects prove successful, it may create unprecedented opportunities for provider networks other than HMOs to serve the growing Medicare population (Hash, 1996). Proponents of Medicare Subvention pointed out that since Medicare is experimenting with various Managed Care Programs and payment methodologies, then why not provide a Medicare Subvention demonstration? Only a demonstration project, evaluated by an independent source, can help both HCFA and DOD realize the potential benefits and drawbacks of implementing subvention across the entire MHS. Evaluation by HCFA or DOD would be inherently biased, with a HCFA evaluation attempting to protect the Medicare trust fund, and a DOD evaluation attempting to protect its current size, end-strength and very survival (Hash, 1996). DOD and HCFA hired The Rand Corporation in early 1999, to evaluate the Tricare Senior Program Demonstration. Representatives from Rand visited MAMC in late February 1999 to conduct a series of interviews with various MAMC departments and divisions integral to the demonstration. Additionally, Rand conducted interviews with representatives of Foundation Health Federal Services Northwest; MAMC's managed care support contractor.

HCFA: Medicare Subvention Concerns

Medicare Financing

Medicare's hospital insurance (Part A) is financed through a payroll tax of 2.9 percent, divided equally between employers and workers. In recent years, payroll tax revenues exceeded insurance payments, and the surplus was accumulated in a trust fund to help pay for future costs.

In 1995, the trust fund amounted to about $134 billion, which is invested in interest-bearing U.S. Treasury securities (Annual Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund, 1996). The problem is that the program's outlays are expected to rise more rapidly than future payroll tax revenues. As a result, the trust fund will be drawn down until it runs out, which is projected to occur in 2002. Unless Congress curtails benefits, raises revenues, or cuts its payments to hospitals, the hospital insurance plan will become insolvent.

In 1994, the average Medicare cost per enrollee of the hospital trust fund was about $2900, while the average payroll tax revenue per beneficiary was about $2,600. That $300 shortfall is projected to grow wider mainly because health care costs are expected to continue climbing more rapidly than the wages subject to the payroll tax. As the gap grows, the trust fund will be depleted (Annual Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund, 1996).

Medicare's hospital insurance payments will increase not only because health care costs in general are rising faster than inflation, but because greater numbers of Americans will become eligible for coverage. The number of Medicare beneficiaries is expected to increase about 2 percent per year for the next fifteen years, with the number of elderly growing from 33 million in 1995 to 35 million in 2000, and eventually to 40 million in 2010. Further, Americans over eighty-five are the fastest-growing population group and also consume the most medical care per capita, exacerbating the pressure on the hospital insurance trust fund (Senate Special Committee on Aging, et al. 1991).

The increase in the elderly population will rapidly accelerate when the baby boomers begin to turn sixty-five in 2010. By 2030, Medicare will become responsible for covering nearly 20 percent of the population, compared to today's 12.8 percent. Demographers project that in just

thirty-five years, the population of Americans aged sixty-five and older will be roughly double today's 33 million (U.S. Department of Commerce, 1996). By the middle of next century, the ratio of workers contributing payroll taxes to Medicare beneficiaries will have declined from today's four-to-one to two-to-one (Annual Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund, 1996).

These statistics form a clear picture of what HCFA and the Medicare program can expect in the near future. It is not surprising that HCFA and members of Congress are so concerned with ensuring the solvency of the Medicare Trust Fund. If the ratio of workers contributing payroll taxes to Medicare beneficiaries does reach two-to-one, taxes will likely rise unless the federal government creates the revenue from significant budget surpluses or other sources. Regardless of what occurs, the problem propagates itself to future generations.

Cost Issues

The elderly who have joined HMOs are generally healthier than the average Medicare beneficiary and are less likely to use covered health services. Medicare pays HMOs based on the average cost of beneficiaries according to their age, sex, and place of residency, but these factors alone have overstated the cost of HMO enrollees to Medicare. Medicare, therefore, has paid nearly six percent more for beneficiaries enrolled in HMOs than it would have spent had participants remained with the standard benefit package (Brown et. al., 1993). HMOs have found methods to make money in the Medicare market, at the expense of the American taxpayer. Those that have not quickly exit the market. In counties where HCFA has set its capitation rates (AAPCC) high, competition among HMOs for Medicare enrollees is expectedly stiff. These HMOs have learned how to care for this population for significantly less than the capitated payment, and they are not obligated to share those savings with the federal government.

The General Accounting Office (GAO), in a report titled "Medicare Managed Care: Growing Enrollment Adds Urgency to Fixing HMO Payment Problem" (GAO, 1995), pointed out that Medicare has not yet harnessed the cost-saving potential of its managed care option. According to the report, Medicare has paid, on average, HMOs more for serving Medicare beneficiaries than it would have spent had those same beneficiaries received care in the fee-for-service sector. Specifically, Medicare cannot lower rates through competition among HMOs or negotiate a share in realized savings that HMOs achieve through greater efficiency because HMO payment rates are fixed. Also, HMO payment rates are not adequately "risk adjusted" to reflect cost differences derived from the healthier enrolled HMO population. Finally, HMO payment rates are based, to a great extent, on county fee-for-service rates, which can vary considerably due to differences in utilization rates. As a result, Medicare's low rates discourage HMO participation in some areas, while high rates cause overpayments in other areas (GAO, 1995).

HCFA's capitation formula is viewed as seriously flawed by virtually everyone (Gesensway, 1995). More specifically, HCFA's current risk-adjustment method is widely regarded as inadequate. The capitation rate (AAPCC) risk-adjustment is intended to account for the beneficiary's age, gender and other demographic characteristics (actuaries). Methodological inadequacy causes HCFA's potential cost savings to be smaller than intended (Grimaldi, 1996). It also causes some risk HMOs to be underpaid for Medicare members while other risk HMOs are overpaid. The possibility of underpayments dissuades many health plans from entering Medicare risk contracts and provides risk HMOs with financial incentives to "cherry-pick" or "cream-skim" the best health risks; that is, to minimize the enrollment of exceptionally high-cost beneficiaries. The current demographic risk-adjusters (e.g., age, gender, Medicaid and institutional status), do a poor job predicting the beneficiaries who will be exceptionally costly to

treat. "Risk HMOs that enroll a disproportionately large number of outlier (extremely costly) beneficiaries (i.e., experience adverse selection) may go broke," (Grimaldi, 1996).

In reviewing the experience of plans participating in the HMO risk program, Mathematica Policy Research pointed out the paradox facing HCFA. Plans making money will stay in the pool and cost HCFA millions. Those losing money will simply drop-out, as have many major managed care organizations. In September 1998, Aetna U.S. Healthcare exited Medicare risk markets in nine states and the District of Columbia. Other managed-care organizations that recently began their retreats from selected Medicare markets include Anthem Blue Cross and Blue Shield, Blue Shield of California, Foundation Health Systems, Health Net, Intermountain Health Care, Humana and PacifiCare Health Systems (Rauber, 1998). All of these organizations cited low reimbursement rates as the primary reason for their moves. If enrollees are healthier on average than other beneficiaries (that is, if the HMOs experience 'favorable selection'), the HMO will save more than the intended five percent and will increase costs to HCFA. If enrollees are sicker on average than other beneficiaries as a result of HMOs experiencing 'adverse selection', HCFA will save money, but the HMOs will lose money and eventually drop out of the program (Mathematica Policy Research, 1993).

The problem of favorable selection could spiral and further drive up the AAPCC, thus increasing capitated payments and Medicare's losses. A 1994 GAO Report explained, "...as more healthy beneficiaries join HMOs, the Medicare fee-for-service population on average becomes sicker, driving up Medicare's average cost of treating fee-for-service payments. When this average cost rises, so does the capitation rate HCFA pays to risk contract HMOs" (GAO, 1994). Favorable selection in the Medicare HMO program enriches the managed care plans and frustrates Medicare's efforts to use managed care as a means of containing costs.

Selection problems will continue unless Medicare either devises a payment formula which properly factors in the health status of enrollees or prevents, through the creation of enforceable legislation, HMOs from selectively enrolling beneficiaries. In fact, HCFA Administrator Bruce Vladeck indicated that, "no operational risk adjuster will contain sufficient information to eliminate favorable selection entirely. So long as the HMO has more information about individual beneficiaries than can be captured by the risk adjuster, the HMO will have an opportunity to create favorable selection" (Vladeck, 1995). Although the GAO has executed extensive reviews of this subject, there is no indication it has developed a new payment methodology that eliminates the problem of favorable selection.

Most empirical studies on this topic have uniformly found that Medicare beneficiaries who enroll in HMOs are healthier than fee-for-service beneficiaries (Grimaldi, 1996). One study by Mathematica Policy Research concluded that Medicare capitation payments to risk HMOs were 5.7 percent higher than had the same beneficiaries remained in the fee-for-service sector.

Quality Issues

In addition to the cost issues facing Medicare, HCFA is concerned about the quality of care provided in HMO's. A recently released study of 2,235 chronically ill patients found that for elderly patients (aged 65 and older) treated under Medicare, declines in physical health were more common in HMOs than in FFS plans (54% versus 28% ; $p<.001$) (Ware et. al. 1996).

Previous studies have found no differences in health outcomes between FFS and HMO plans, but these studies followed patients for only one year. The Ware study supports the conclusion that these studies were too brief to draw conclusions about health outcomes. The study also found no statistically significant differences after one year, but the 4-year statistical models reported in the Ware study explained twice as much of the variance in patient outcomes

as did the same models in analyzing only one and two year outcomes. Thus, follow-up periods longer than one year may be required to detect differences in outcomes for groups differing in chronic condition, age, income, and across different health care systems (Ware et. al. 1996).

At the American Medical Association Conference in San Francisco in October, 1996, Mr. Ware, a researcher at the New England Medical Center, who also teaches at Harvard and Tufts University, said that medical researchers "have not been looking at the sick, the elderly and the poor. This is the group for whom health care matters the most. These are vulnerable patients for whom less care is not going to produce a better state of health" (Olmos, 1996). Ware cautioned that the study results were not an "indictment" of managed care but rather that the results conflict with the idea that what works well for younger, healthier, more well to-do patients will work just as well for the elderly, poor and chronically ill (Olmos 1996).

Other Concerns with Medicare Subvention

Although the Memorandum of Agreement between HCFA and DOD has specified a Medicare reimbursement rate lower than the 95 percent of the AAPCC (93 percent) that Medicare pays to Medicare HMO's, the Congressional Budget Office, in a memorandum dated 19 September 1996, stated that the Medicare Subvention Demonstration would increase Medicare costs by $80 million dollars over four years (F-D-C Reports 1996).

Representative Bill Thomas (R-CA), Chairperson of the Health Panel of the House Ways and Means Committee, wanted tighter test controls and greater proof of savings before implementing a Medicare demonstration project. "I'm not going to agree to something unless I have a comfort level that it's not costing (Medicare) more money. I don't have (that) comfort level," said Thomas (Philpott, 1996).

Representative Pete Stark (D-CA), an Air Force veteran, portrays the Pentagon as an insatiable budget beast now determined to feed off Medicare. He stated, "the Defense Department has enough cash to solve its own health care crisis." He noted that $9 billion was added this year to the 1997 Clinton defense budget, and wondered why DoD could not simply spend some of this additional money to take care of retirees (Philpott, 1996).

Costing in Health Care Organizations

General

Health care organizations must support the powerful concepts of continuous quality with better internal management systems, (Griffith, 1995). Through capitated payments, managed care attempts to control utilization of health services while transferring the financial risk from payer to provider. From a provider's perspective, achieving success under a capitated fee system depends on appropriate utilization and allocation of resources and control of cost per unit of service (Ramsey, 1994). To accomplish these goals, hospitals and medical centers of the military health system (MHS) must develop stringent control over operations because their ability to provide low-cost, efficient, effective, quality care for a large number of beneficiaries is essential to long-term viability.

To improve performance, managers and leaders must accept responsibility for meeting the three tests of managerial accounting. These three tests include the concepts of profitability, control and improvement. The responsibility of the finance system is to produce the data for all three tests. The normal process in well-managed organizations is to develop forecasts of each test, refine these into expectations that are incorporated into the budget process, and then to monitor the actual performance against expectations. The third test is used to establish goals for continuous improvement (Griffith, 1995). Financial continuous improvement (CI) relies upon

estimates and forecasts of unit costs that are aggregated to final product costs, (an element of product line management). The measurement goal is to provide the improvement team with a reliable model allowing them to evaluate financial/economic efficiency in terms of cost and quality trade-offs (Griffith, 1995).

Cost measures are generally acquired from the accounting system, specifically from cost accounting and budgeting systems. The difficulties lie in identifying true unit cost, and its fixed, variable, and marginal components. It is safe to say that the precise cost, particularly the precise marginal cost, is unattainable. Cost measurement is, and will always be, a matter of approximation (Griffith, 1994). Generally, Costs are forecast by historic unit costs, by natural account, with independent assessment of trends in prices or purchased goods and services. "Well-managed organizations recognize danger signals or trends, and make the necessary adjustments. Poorly managed organizations ignore the financial planning step, or convince themselves that miracles will happen," (Griffith, 1995).

Because the incentives have changed so significantly, decision making methods concerning resourcing require modification. Hart and Conners (1996) provided a Resourcing Decision Model they used at Naval Hospital Twenty-nine Palms. They ask three basic questions. First, does the proposal make good business sense? Second, does the resourcing decision contribute to readiness? Finally, is it the right thing for the patient? If these can be adequately answered then the MTF commander can proceed with funding and implementation (Hart and Connors, 1996).

The most fundamental element for measuring efficiency remains understanding the operational costs and comparing it with output. Quality of the revenue-generating activities, for example, is measured by the adjustment. This has long been a problem in the government. Vann (1997) notes that, "a hunger exists in governmental operations for accurate and easy-to-

understand financial data." He contends that government services are still tied to the obsolete Planning, Programming, Budgeting, and Execution System (PPBES) implemented in 1962, which typically accounts for costs at the major activity level. The challenge is relating costs appropriately with the specific services provided.

To provide more financially efficient and effective care to beneficiaries in the face of ever shrinking resources requires many changes in the way the MHS attempts to execute its mission. One of the most critical changes is the future implementation of enrollment based capitation (EBC) in the MHS. The intent is for EBC to serve as the cornerstone of the MHS's efforts in competing for health care dollars in light of the emerging national health care reform movement (EBC Implementation Guide, 1997). Many influential individuals recognize the need to improve efficiency in the health care market place includes the delivery of military medicine. The climate of extreme pressure to make the MHS accountable has driven senior leaders to search for a method of measuring efficiency in the capitated managed care environment.

"In the twenty-first century, the first-line health care organization will control cost and quality as one of its central functions," (Griffith, 1995). One method for operational control is the cost accounting system. Activity based costing (ABC) systems emphasize activity analysis and cost drivers to promote understanding and measurement of costs. Organizations can use ABC for its most important activities in terms of cost, time, and quality (Ramsey, 1994).

Activity Based Costing

To facilitate efforts at improving efficiency and assist in the development of appropriate capitation rates, MTFs are beginning to use activity based costing (ABC). "This technique identifies the relationship between an activity and the resources needed to complete it and then assigns costs to those resources consumed by the activity," (Schuneman, 1997). The use of

ABC assists in the implementation of EBC to facilitate the realignment of the financing mechanisms with the operational aspects of the TRICARE programs. To meet the challenge of managing an enrolled population the MTFs must fully understand the total costs of providing care to their specific enrolled population," (EBC Implementation Guide, 1997).

Vann (1997) advocates switching to the Activity Based Costing (ABC) technique that many corporations are starting to use. Ramsey (1994) recommended that civilian hospitals convert to ABC to better identify their cost drivers and the cost of outputs. Costs are described in terms of the actions that consume resources. These costs are then attached to the specific consumer products. This relationship allows management to change their approach from broad categories of cost pools (civilian pay, travel, supplies, etc.), to analyzing the outcomes of particular activities.

The use of ABC facilitates planning, benchmarking, reimbursement rates, service line costs, and business process reengineering. Ramsey (1994) considers ABC critical for healthcare organizations that want to succeed in the managed care environment. ABC results in the promotion of cost efficiency that emphasizes continuous quality, maximized resources for product-line management, and focused continuous improvement.

While previous research reports that hospitals are increasingly adopting costing methodologies, survey results indicate that costing systems and cost methodologies have not been widely implemented (Hill & Johns, 1994). Studies found that despite cost accounting's benefits, immediate cost control problems are short term, focused only on cost cutting solutions. These short term measures allow hospitals to survive in the current environment, but more sophisticated cost management is necessary in the near future due to health care reform and other pressures (Hill & Johns, 1994).

Efficiency

The review of the available literature revealed very little documentation of actual financial levels of efficiency relating to military MTFs. A limited amount of related information that deals with general financial efficiencies and physician profiling was obtained. Hadley, Zuckerman, and Iezzoni (1996) found that those health care reforms and market forces that put financial pressures on hospitals result in cost-containment and improved efficiency. Steadily diminishing federal resources coupled with increased levels of scrutiny is the current and future reality for the military health care system (MHS). The necessary levels of cost control and quality cannot be achieved without a clear mission, governing board review of the medical staff, a well-designed structure for making and implementing decisions, a competent planning function, a sound finance system (which includes an efficient cost analysis mechanism), and modern information systems, (Griffith, 1995). Hospital commanders and administrators must have a means of measuring financial efficiencies as well as mechanisms to identify the variables that have the greatest impact on those efficiencies.

Other studies have attempted to address the critical issue of the hospital administrators and physicians struggling to blend financial efficiency with quality of care. While quality of care must remain paramount within the military healthcare system, it must be provided in an efficient manner. Fleming and Boles (1994) cite one study which identified a model that relates the financial health status of an organization (financial integrity) to the quality of care provided by that organization (clinical integrity) within an environment characterized by various forms of risk. The model suggests that both concepts work in concert to determine the corporate destiny (success, bankruptcy, or merger) of the organization.

Studies whose mutual focus is Graduate Medical Education (GME) lend further support to the move towards ABC. Stoddard, Kindig, and Libby (1994) confirm that substituting house staff and other healthcare providers to reduce resident staff is actually less expensive. Additionally, Morey, Ozcan, Retzlaff-Roberts, and Fine (1995) suggest that optimal cost control could be gained by modifying the HCFA method of offering much higher prospective reimbursements for teaching hospitals and separating hospitals into peer groups that would, in turn, develop "best practices".

Many civilian hospitals are still non-managed care oriented and operate in a for-profit or not-for-profit fashion. Shukla, Pestian, and Clement (1997) recently found that there were no significant differences in measures of efficiency or productivity between for-profit and not-for-profit hospitals in Virginia. The major reason that for-profit hospitals are more "profitable" is that they manage revenue better (Shukla, Pestian, and Clement, 1997). ABC would provide the tools to improve this situation for not-for-profit hospitals. Better management of non-revenue product-lines, like the hospital billing department, could improve efficiency.

Miller (1997) discusses the relationship of Medicare costs between facility and physician services. He used a multivariate regression analysis to determine that a 10.0 percent increase in physician services is associated with a 3.0 percent rise in facility services. He concluded that efforts to reduce physician services would also reduce facility services in the long run. Conner (1995) noted that other factors require review for proper staffing and resourcing. He found that a one percent increase in elderly population requires a two percent increase in staffing. Through the utilization of the ABC technique, better accountability by DOD Medical Centers with GME programs may be possible. Additionally, appropriation of funds may be based on a more objective standard or benchmark.

Costing Data and Hospital Costs

Risk-bearing HMOs are paid a capitation rate for enrolled Medicare-eligible members based on the amount Medicare would have spent had the same beneficiaries continued to receive care in the fee-for-service sector. The rate includes a risk adjustment for beneficiary age, gender, and other demographic characteristics. If adjustments are flawed, consumers and employers cannot compare the quality of care provided by different health plans. For valid comparisons, data must be risk adjusted for differences in members' health characteristics (Grimaldi, 1996).

Data from Medicare administrative records systems have been used to study the medical care costs of specific conditions. Medicare administrative records have also been used to estimate the cost to Medicare of treating patients with specific conditions and the opportunity cost of treating the same patients. Findings have revealed that Medicare claims and cost report data provide an opportunity for researchers to track the costs associated with the health care of people age 65 and older. The data also enables researchers to compare costs different medical conditions, costs of treatment patterns, costs across different geographical regions, and cost over time (Lave et al., 1994).

The Medicare prospective payment system (PPS) was designed to contain spiraling costs by creating incentives for hospital managers to operate more efficiently. Risk and reward were introduced under this notion. Hospitals whose average costs per case were less than the average PPS payments gain under the system and those hospitals that exceed PPS payments lose (Bray et al., 1994). Many quantitative studies have been conducted of the winners and losers under this system, but they do not capture the differences at the hospital operating level associated with systems such as financial management. No payment system short of a cost-based reimbursement system can wholly account for unique local factors that contribute to financial performance (Bray

et al., 1994). However, we cannot regress to the 1970's. The cost-based reimbursement system is largely responsible for the soaring costs the PPS was created to contain. Therefore, accurately adjusted capitated rates are essential to the continued participation of at-risk HMOs in Medicare.

Previous Research on Impact of Medicare Beneficiaries

Research on the Tricare Senior Project initialized attempts to learn about costs associated with providing care to the Medicare-eligible population. One particular study describes the general methodology and data requirements for periodically estimating the cost of providing care to Medicare-eligible beneficiaries participating in the Medicare Subvention demonstration projects on an enrolled or space available (fee-for-service basis) (Coventry et al., 1996).

A previous study looked at 488 burn unit victims over a two year period. The purpose of the study was to examine possible predictive factors affecting both in-patient lengths of stay at the burn unit and the subsequent costs for supplies (Dowdy et al., 1996). This research set the framework and methodology for a portion of this study.

Rosenthal & Landefeld conducted a study which examined over 23,000 medical and surgical admissions in an academic facility over a four year period. Results revealed that older patients cost hospitals more and suggest hospitals may face financial disincentives to care for older Medicare patients (Rosenthal & Landefeld, 1993). Their research indicated that individual patient cost for Medicare patients was 6 percent greater than for other patients. Rosenthal & Landefeld attribute the greater costs primarily to severity of illness, in which the patients also incurred a longer length of stay.

The Rosenthal & Landefeld study also found the equability of DRG-based hospital reimbursements and payments, with respect to age, may have been adversely affected by Medicare's 1987 decision to eliminate older age (over 70 years) as a criterion for classifying

DRG's. Researchers state that including patient age in the formulas that determine DRG rates may make hospital reimbursement more equitable (Rosenthal & Landefeld, 1993).

Medicare Subvention Funding and Reimbursement

The term "subvention" indicates a grant of financial support from one institution to another. In this context, it is taken to mean that HCFA will support DOD in funding the care of enrollees in Tricare Senior Prime program (Moon and Walsh, 1998). However, DOD has used appropriated funds to care for dual-eligible beneficiaries in the past, which is deemed by agreement between the DHHS and DOD as the historical LOE. The financial support from HCFA will be the dollar value of care provided that is greater than the LOE established by the OMB (Moon and Walsh, 1998). For care provided beyond the historical LOE, HCFA will reimburse DOD based on a capitated amount per Senior Prime enrollee; the adjusted AAPCC discussed earlier. The LOE for the demonstration is the combined LOE of all six demonstration sites. Thus, if all but one demonstration site meets or exceeds LOE, then no demonstration site will receive reimbursement. These terrible odds create negative incentives.

Additionally, a more basic problem exists. The populations of each of these six demonstration sites possess differing demographic qualities, as reflected in the AAPCC. At-risk Medicare HMOs regularly evaluate whether continued participation is prudent. The evaluation may indicate continued participation in one area of the country or one county of a state is no longer successful, (i.e., cost-neutral or profitable). This does not predicate their retreat from areas in which success is achieved. In other words, the benchmark for one area is not the benchmark for another. Why, then, should the success of the entire demonstration be based on a combined LOE?

Under the demonstration, DOD may receive interim payments for the enrollment and treatment of its dual-eligible beneficiaries. While executing the demonstration project during any demonstration year, the DOD may receive a monthly per-member, per-month capitated amount for Tricare Senior Prime enrollees when the site's enrollment is above a specified threshold. These payments are interim, or provisional, payments. At the end of each demonstration year, a reconciliation will be conducted to determine whether DOD is entitled to keep any of the interim payments, and to determine if the amount of reimbursement was appropriate (Cohen, DeParle, Martin and Shalala, 1998).

A key aspect to the agreement between DOD and DHHS is the concept of Level of Effort (LOE). Under the agreement, DOD and HCFA agreed to use 1996 as the base-line year for historical LOE spending. Thus, the LOE is literally the FY96 expenses for "Medicare covered services" provided to dual-eligible beneficiaries who reside in a participating site Medicare service area, (Cohen, DeParle, Martin and Shalala, 1998). Also included, since the focus is upon population-based costs rather than facility-generated costs, are expenses for Medicare service area (40 mile catchment area directory) patients referred to other military treatment facilities. MAMC's estimated LOE for FY96 is $26,252,332. Although DOD can not with great accuracy identify the true costs, the LOE accounts for those funds that are historically in the budget for the treatment of dual-eligible beneficiaries.

At each site, achieving the LOE may be accomplished by a combination of two factors. One factor is the dollar value of care provided to enrollees. The rules of the demonstration require that each site must provide at least 30 percent of all Medicare services to enrolled dual-eligible beneficiaries. The remaining dollar value of care may be credited to the second factor, the space-available care provided to those dual-eligible beneficiaries not enrolled in Tricare

Senior Prime. The percentage of care provided to enrollees must be 40 percent and 50 percent in the second and third years of demonstration, respectively. The balance of care may consist of space-available care. When sites exceed the LOE and satisfy the appropriate ratios outlined above, HCFA will pay a per-capita amount to DOD. The reimbursement rate is set, by agreement, at 95 percent of the AAPCC (the capitated rate paid to Medicare+Choice plans in each site's local area). This rate is then reduced based on capital improvement, graduate medical education and other factors that are usually included in DOD appropriations for the MHS (Cohen, DeParle, Martin and Shalala, 1998). The resulting reimbursement rate is approximately 93 percent of the AAPCC as originally negotiated between DOD(HA) and HCFA.

Moon and Walsh (1998) contend that, "...there is an incentive for sites to deliver care beyond the historical LOE, thus reducing the demand for traditional Medicare services in the commercial market." Herein lies the potential for break-even expenditures ("cost-neutrality") for the federal government. Subvention reimbursement is expected to cause a shift of funds from DHHS to DOD at more favorable rates to the federal government, rather than requiring older retirees to use the more expensive fee-for-service Medicare benefits available in the commercial market. The DOD expects to use potential DHHS reimbursements to cover the costs of providing care to this group of beneficiaries and while continuing to provide care to military retirees. The Congressional Budget Office (CBO) emphasizes the importance of an accurate LOE for ensuring the Medicare subvention demonstration's cost-neutrality. In February and September 1996 cost estimate memoranda on Medicare subvention demonstration bills, the CBO stated that, excess Medicare payments would result in deficit spending because, "DOD is funded with discretionary money and Medicare Trust Fund monies are mandatory," (GAO, Sep 1998).

Purpose

The purpose of this research effort is to determine if MAMC can achieve cost-neutrality under the Tricare Senior Project, and positively contribute to the achievement of the DOD LOE established for the Medicare Subvention project. Two supporting objectives will be examined. The first seeks to determine if the cost of treating Medicare dual-eligible (65yrs and older) beneficiaries is significantly greater than the cost of treating CHAMPUS eligible (under 65yrs) beneficiaries. The second examines whether MAMC can meet its assigned LOE based on the accrued costs for care rendered to dual-eligible beneficiaries as recorded in existing systems. Cost-neutrality is achieved if the LOE is met but not exceeded.

Supporting Objectives

Objective I

While other studies have examined the impact of other variables on individual patient costs, none have specifically identified which factors associated with delivering the Tricare Senior Prime benefit will have the greatest financial impact on MTFs. Therefore, this study will first seek to determine if the cost of treating Medicare dual-eligible (65yrs and older) beneficiaries is significantly greater (order of magnitude) than the cost of treating CHAMPUS eligible (under 65yrs) beneficiaries. More specifically, is there a statistically significant difference between the individual patient costs incurred AND the patient beneficiary categories (under 65 and over 64 years of age) and the various clinic services they utilize at MAMC?

Thus, the null hypothesis (H_O) is stated as: individual patient costs (Y_1) are independent (not influenced by) of patient beneficiary category (X_1) and clinic service ($X_2 \ldots X_{10}$); or

$$[H_O: Y_1 \not\sim f(X_1 \ldots X_{10})].$$

Conversely, the alternate hypothesis (H_A) is stated as: individual patient costs (Y_1) are dependent (influenced by) of patient beneficiary category (X_1) and clinic service ($X_2 \ldots X_{10}$); or

$$[H_A: Y_1 = f(X_1 \ldots X_{10})].$$

Theoretical Framework: Objective I

Several studies sought to determine if actual costs and lengths of stay associated with treating Medicare eligible patients are higher than for other patients. One study (see Figure 1-1) took the independent variables of gender, race, severity of illness, level of education, income, and time of admission to determine their influence on patient charges and lengths of stay (Rosenthal & Landefeld, 1993).

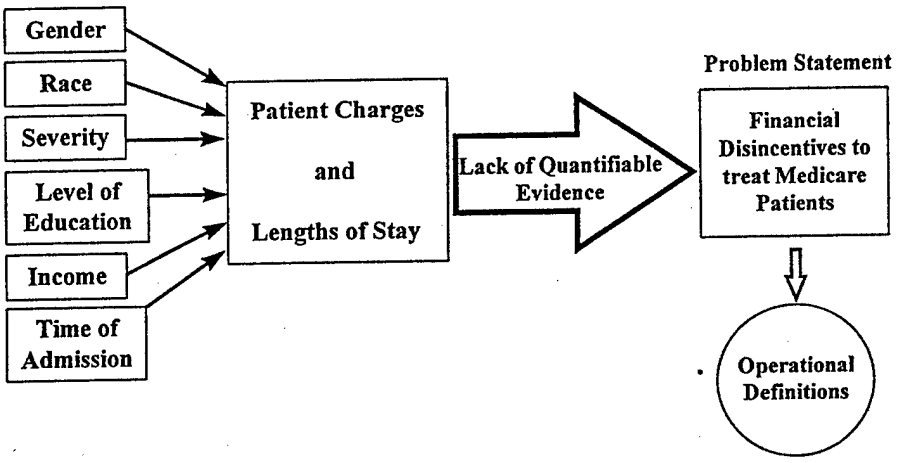

Figure 1-1. Rosenthal & Landefeld Theoretical Framework

To support the purpose statement in this research effort, patient category and clinic service serve as predictors of the criterion variable of individual patient cost, (see Figure 1-2 below).

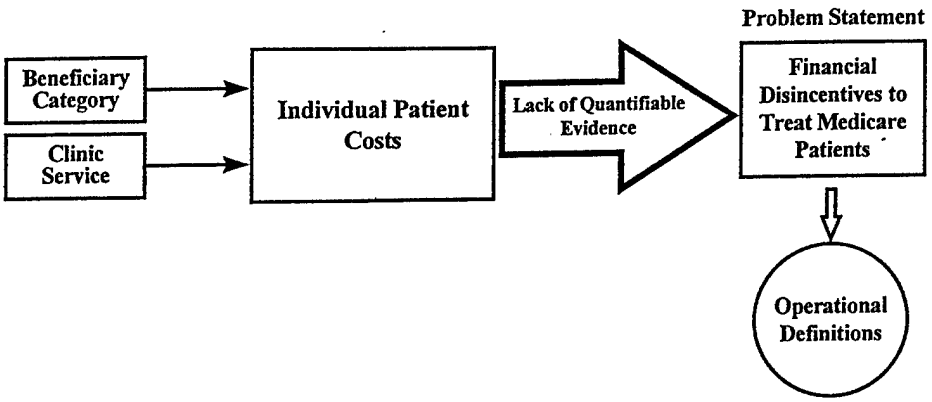

Figure 1-2. Objective I: Theoretical Framework

Objective II

This objective seeks to determine if MAMC will meet or exceed its assigned LOE based on the identification of the prospective total costs (based on historical costs) of providing care to Tricare Senior Prime enrollees and Medicare-eligible space-available users of MAMC healthcare services. Simply, will MAMC meet its LOE based on the accrued costs for care rendered to dual-eligible beneficiaries as recorded in existing systems? Recall that one of the key objectives of the Medicare Subvention/Tricare Senior Demonstration is cost-neutrality relative to both DHHS and DOD. Cost-neutrality is achieved if the LOE is met but not exceeded.

These data will be stratified by department or service in order to identify those cost centers that provide the greatest amount of care, and therefore potentially expend the greatest dollars, to dual-eligible beneficiaries.

Theoretical Framework: Objective II

Objective II seeks to determine if MAMC's assigned LOE will be met based on prospective total costs (based on historical costs). Thus, all costs associated with providing care to dual-eligible beneficiaries must be considered.

Therefore, the total of in-patient costs, out-patient costs, and out-patient pharmacy costs for

care rendered to dual-eligibles (essentially cost of providing the total Tricare Senior Prime benefit) will be compared to MAMC's assigned LOE of $26,252,332, (see Figure 1-3).

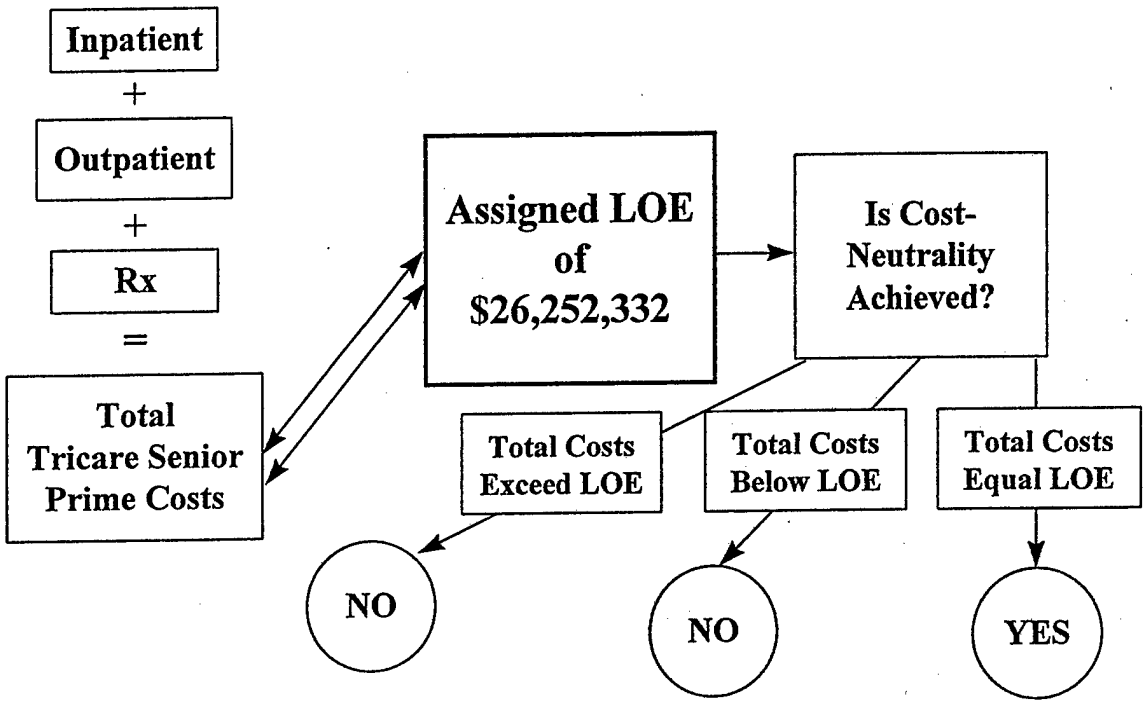

Figure 1-3. Objective II: Theoretical Framework

Attaining LOE is considered cost-neutral to both MAMC and HCFA. Although the combined efforts and results of all six demonstration sites are pertinent to the overall demonstration, only cost-neutrality relative to MAMC and HCFA is considered for the purpose of this research effort.

CHAPTER II: METHOD AND PROCEDURES

Ethical Considerations

Ethical issues with this research effort were considered. Due to the nature and format of the data, the researcher found no significant ethical concerns.

Data Sources

The primary sources for data used to support the objectives are: the Composite Health Care System/Ambulatory Data System (CHCS/ADS); the Corporate Executive Information System (CEIS); and the Medical Expense Performance Reporting System (MEPRS).

MEPRS accounts for the standard government costs of civilian pay, travel, supplies and equipment, as well as the salaries paid to the military personal assigned to fixed healthcare facilities. MEPRS compares this with an output measured in Relative Weighted Products (RWPs). This RWP is comparable with the DRG weighted system used by HCFA.

The MEPRS is divided into several major categories of costs. Direct inpatient (A-account) costs are allocated to each service or department. Direct out-patient (B-account) costs are assigned to individual services and departments. Dental (C-account) costs are not used in this research effort. Ancillary services such as pharmacy, pathology, radiology, and nutrition care are found in the D-account. Administrative costs from departments and sections such as logistics and patient administration are found in the E-account. The F-account contains an assortment of healthcare related costs. Some cost centers may be valid (e.g., Student Expenses - Graduate Medical Education). Other costs are not valid for use in the study (e.g., Veterinary Services). The final account (G) is for military specific costs such as personnel salaries for deployed individuals. The MEPRS is structured to facilitate allocation of ancillary and administrative costs to their respective in-patient and out-patient services.

However, numerous complaints have been leveled against MEPRS because of poor quality input and oversight, (GAO, Sep 1998). Additionally, MEPRS spreads costs on a percentage or step-down methodology. MEPRS uses the hospital average for each service or department instead of the actual weighted units produced by individual services. This has led to complaints

that, while MEPRS compares costs in relation to an output, better and more detailed data is available from Retrospective Case-Mix Analysis System (RCMAS). However, RCMAS is no longer a source for data dated beyond FY97.

CHCS/ADS provides out-patient encounter data needed to execute out-patient portions of Objective II. CEIS incorporates data from several legacy systems, as well as, systems still in use today. CEIS has three components: QUANTUM, which provides viewing of standard reports used to support both budgeting and staffing decisions; TRENDPATH, which provides viewing of ad hoc reports produced by TRENDSTAR. The reports contain information about workload, cost, beneficiary population, and other related metrics relative to either an MTF or Region.

Validity and Reliability

It is said that, "reliability is a contributor to validity and is a necessary, but not sufficient, condition for validity," (Cooper and Emory, 1995). The data is taken from record repositories with rigorous regulatory requirements, and in this context, reliability is a measure of available information within each of the databases outlined above in Data Sources. Therefore, reliability of the data is not tested because of the mutually exclusive and categorically exhaustive independent values. Dependent values were entered at face value.

An important criteria to satisfy is reliability. Reliability will ensure the research effort has consistency and is "free of random or unstable error" (Cooper and Emory, 1995). The steps to establish reliability include: a) Use of standardized database sources; b) Use of the same individual to collect the data from the sources; and c) Use of a second investigator to randomly check the accuracy of transferring raw data to the software programs, (MicroSoft Excel and SPSS/PC Release 7).

Assumptions

The research effort employs several technical assumptions. First, it is assumed that clinic visits must reflect access to care. Currently, the MHS counts for clinic visits under two broad categories; out-patient and in-patient. In-patient clinic visits are easily used to determine one aspect of workload. Therefore, out-patient visits from MEPRS reports are also used when addressing Objective II.

Second, because the ADS was only recently adopted by all MTFs, a method for calculating the intensity of the out-patient visits from historical data is needed in order to estimate outpatient costs. The Ambulatory Weighted Unit (AWU), already available in the MEPRS, was selected. The DOD(HA) standardized AWU provides a resource intensity factor for each different out-patient clinical service.

Third, the severity of illness and resource intensity for in-patient care can be sufficiently addressed by the HCFA approved Case Mix Index (CMI) used in MEPRS. This will allow comparisons between clinical services, and patient age groups.

Fourth, MAMC attaining LOE is considered cost-neutral to both MAMC and HCFA. Although the combined efforts and results of all six demonstration sites are pertinent to the overall demonstration, only cost-neutrality relative to MAMC and HCFA is considered for the purpose of this research effort. In Objective II, a result from the analysis of the data that deviates +/- $10,000 from the established LOE for MAMC ($26,252,332) is considered successful, (i.e., cost-neutrality is achieved).

Fifth, it is assumed that 93 percent of the AAPCC for Part A and B is sufficient for calculating the estimated reimbursement (revenue) MAMC may expect for in-patient and out-patient care rendered to dual-eligible beneficiaries if the LOE is met. This is the standardized

rate that DOD and HCFA initially agreed upon. It will facilitate the comparison of MAMC to other at-risk Medicare HMOs. Additionally, it will assist in the approximation of actual costs minus interim payments/reimbursements.

Sixth, it is assumed that MAMC meets all the criteria and requirements delineated in Appendix A (The Medicare Demonstration of Military Managed Care Memorandum of Agreement), Attachments C and D, for receipt of interim payments/reimbursements.

Seventh, it is assumed that MAMC is consistently operating in a positive range of efficiency as is possible, all things considered and remaining equal.

Method: Objective I

To conduct this portion of the research, (the individual costs associated with treating both Medicare dual-eligible beneficiaries versus other military beneficiaries), retrospective data was collected from CEIS and MEPRS for FY98.

MAMC recorded 10,014 dispositions in FY98. These total dispositions for FY98 represent the prospective population being measured by use of historical data. As a representative sample, 3,000 records of in-patient care, approximately 30 percent of the prospective population measured (10,014), were randomly (via random number generator) drawn from the MEPRS Standard In-patient Data Record (SIDR) database for FY98, (see Figure 2-1, below).

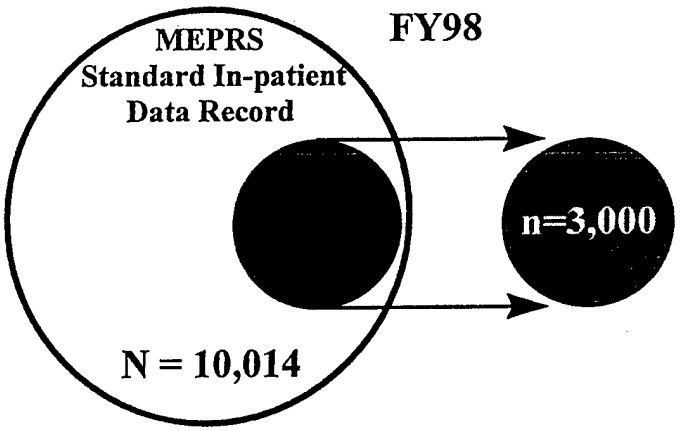

Figure 2-1: Sample Data Framework

Total expense minus physician salaries for each in-patient service represented in the sample will be pulled from the Standard In-patient Data Record (SIDR) system, a database which serves as a central record repository for all DOD MTFs. This total expense will account for all support and overhead costs utilized by the representative in-patient services but not directly attributable to the direct costs associated with surgery visits. These costs include a proportion of the expenses associated with administration, base operations, education and training, housekeeping, laundry and plant, pharmacy, lab, nuclear medicine, and central materiel services, (DOD MEPRS, 1995).

Although individual costs are a focus of this objective, they are not used directly in statistical computations. Instead, an Average Cost per Procedure per Service Visit per Individual Patient by Beneficiary Category is used. This average individual cost per visit is achieved by dividing the total clinic service expense by the sum of the RWPs for that particular service which yields a relative cost per clinic. That cost is then multiplied by the individual CMI associated with the particular visit. The product of these two items is the individual cost per visit. Figure 2-2 (below) provides an example of an individual cost calculation.

MTF	MEPRS	Clin Svc	CMI	# Disp	RWP	Indiv $	
MAMC	ABIA	Plst Surg	1.0995	1	1.0995	$ 4,539.38	(CW x Wt'd $/Clin)
MAMC	ABIA	Plst Surg	1.3206	2	2.6412	$ 5,452.21	
MAMC	ABIA	Plst	2.5572	1	2.5572	$ 10,557.62	
MAMC	ABIA	Plst Surg	3.5098	1	3.5098	$ 14,490.41	
Total ABI 65+				5	9.8077		
				RWP <= 64	135.2202		
				Total RWP	145.0279		
					At Avg $	$ 8,759.93 /indiv for ABI	
Total Exp per Clinic			$ 598,760.00				
Relative Wt'd Cost per Clinic/Service			$ 4,128.58				

Figure 2-2: Sample Individual Cost Calculation Model

The data are then arrayed in MicroSoft Excel to organize a transfer to SPSS for statistical analysis. See Appendix D-1 through D-20 for examples of the data structure in Excel prior to import to and analysis by SPSS.

Operationalization of Variables: Objective I

The dependent variable for this supporting objective of the research effort is individual cost per patient ($/Pt). Individual cost per patient is determined using the method described above. The independent variables include patient category and clinic service, which are evaluated for statistical significance as a whole and then as individual clinic services.

Each of the independent variables is represented as a binary variable mutually exclusive and categorically exhaustive. Patient category is coded 1 = Medicare eligible beneficiary and 0 = all others. Likewise, each of the nine clinic services is coded as a mutually exclusive binary variable by indicating a "1" if the visit took place at that particular clinic, or "0" otherwise. The data was taken from records repositories with relatively rigorous regulatory requirements. Therefore, reliability is a measure of the available information within each of the databases outlined in Data Sources above.

Application and Results: Objective I

For Objective I, retrospective data for MAMC was provided by the Resource Management Division (RMD) of MAMC and through data query in the CEIS components QUANTUM and TRENDPATH. The data from MEPRS and CEIS includes case mix index (CMI), dispositions (# Disp), relative weighted products (RWP) and individual cost (Indiv $) for individual patient encounters for nine separate clinic services in the Department of Surgery at MAMC. The sample consisted of 3,000 records taken from the first six months of FY98 (October 1997 through March 1998). The data were arrayed in MicroSoft Excel to organize the data transfer to SPSS.

Descriptive Statistics

SPSS/PC, Release 7 was used to execute the statistical analysis of the raw data acquired from the databases described earlier. Table 2-1 depicts the descriptive statistics for both dependent and independent variables. Table 2-2 provides the descriptive statistics for Individual Patient Cost with Patient Category controlled. Tables 2-1 and 2-2 provide categorical data means and standard deviations. Figure 2-3 presents a graphical depiction the Mean Cost per Patient Category by Clinic Service. Table 2-3 displays the results of the assessment of correlation (Pearson's *r*) of the independent variables (Patient Category and Clinic Service) to the dependent variable (Individual Patient Cost). The sample size is 3,000 patients (n = 3,000). Binary data is presented as raw numbers and percentages, with continuous data expressed as means and standard deviations.

Although there were significantly fewer Medicare beneficiaries seen relative to other beneficiaries (965 vs. 2,035), the mean individual cost ($8,587.37 vs. $8,258.72) is higher for Medicare beneficiaries than for other beneficiaries. This is expected due to the impact of age and the severity of illness seen in most Medicare patients. Results from previous research (Callahan,

1996) indicate that the mean individual cost for Medicare patients may be as much as 6 to 8 percent greater than for other beneficiaries. In this case, the mean individual cost for Medicare beneficiaries is 9.6 percent greater.

	Sample Size		Individual Patient Cost	
	n	percent	mean	standard deviation
Indiv Patient Cost	3000	100%	$ 8,318.19	$ 10,505.12
By Pat Category				
Medicare	965	32.16%	$ 8,587.37	$ 10,561.52
All Others	2035	67.83%	$ 8,258.72	$ 10,437.14
By Total Clinics				
General Surgery	1292	43.06%	$ 8,159.61	$ 12,505.35
Cardiology	434	14.47%	$ 12,970.06	$ 8,250.09
Neurology	266	8.86%	$ 7,595.59	$ 8,810.61
Ophthalmology	63	2.1%	$ 17,672.74	$ 6,792.24
Oral Surgery	96	3.2%	$ 7,054.86	$ 6,568.55
Otolaryngology	201	6.7%	$ 14,031.33	$ 12,924.69
Plastic Surgery	141	4.7%	$ 5,876.72	$ 2,032.93
Urology	188	6.26%	$ 5,408.45	$ 3,052.22
Periph-Vascular	319	10.63%	$ 8,790.69	$ 10,926.27

n = 3,000

Table 2-1: Descriptive Statistics

	Mean Patient Cost			
	Number	Medicare	Number	All Others
Total Clinics				
General Surgery	342	$ 8,527.04	950	$ 8,025.19
Cardiology	172	$ 13,400.73	262	$ 12,338.08
Neurology	24	$ 8,365.28	242	$ 7,452.91
Ophthalmology	7	$ 17,728.92	56	$ 16,352.25
Oral Surgery	5	$ 7917.55	91	$ 4,169.33
Otolaryngology	26	$ 20,468.49	175	$ 12,365.49
Plastic Surgery	6	$ 8,584.29	135	$ 5,745.28
Urology	54	$ 4,907.65	134	$ 5,794.06
Periph-Vascular	170	$ 10,826.94	149	$ 6,536.22

Table 2-2: Descriptive Statistics of Individual Patient Cost with Patient Category Controlled

Table 2-2 portrays mean patient cost per clinic service, with patient category controlled. As shown, the data provides the anticipated information; that although fewer Medicare patients are seen, the mean individual patient cost for Medicare patients is higher than that for other beneficiaries with a few confounding exceptions. The same data, in graphical format (Figure 2-3), further delineate this relationship between Medicare and other beneficiaries, as well as identifies those clinic services which are confounding.

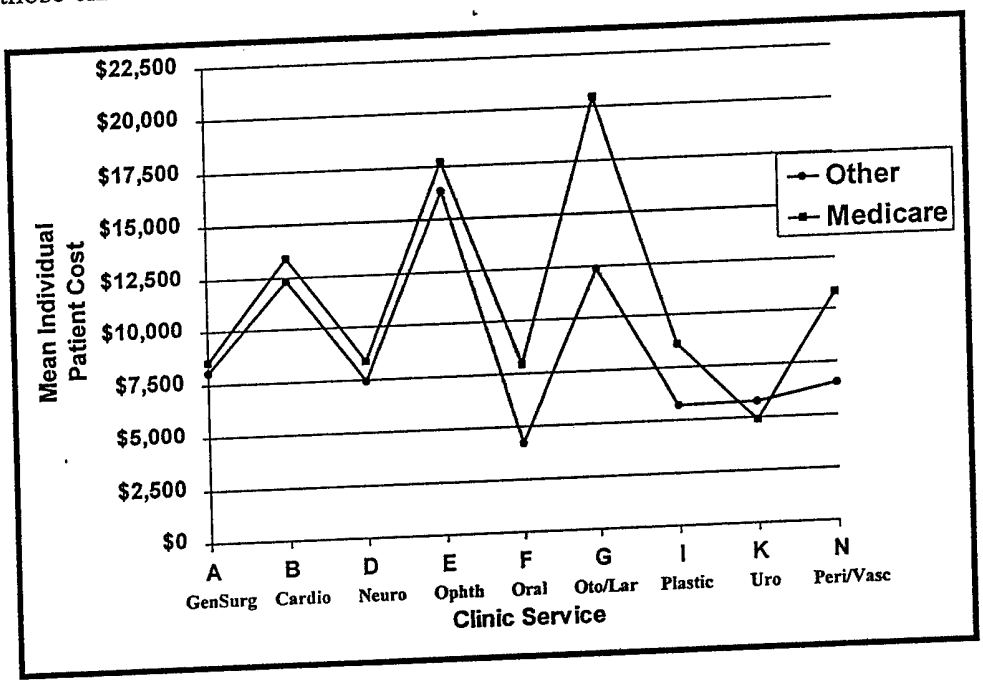

Figure 2-3: Mean Cost per Patient Category by Clinic Service

Correlation of Variables

Pearson's *r*, also known as the coefficient of correlation, measures the interdependence of two numerically valued random variables. The value of Pearson's *r* is on a scale between -1.00 and +1.00. When Pearson's *r* is zero, there is no correlation, and when Pearson's *r* equals -1.00 or +1.00, there is perfect correlation. Thus, the closer the observed value of Pearson's *r* is to its limit of ± 1.00, the stronger the correlation. Strong correlation, positive or negative, may indicate a causal, complimentary, parallel or reciprocal relationship.

Table 2-3 depicts results of the assessment of correlation (Pearson's *r*) of the independent variables (Patient Category and Clinic Service) to the dependent variable (Individual Patient Cost) in this supporting objective. Positive values indicate a positive relationship between the respective clinic service and patient cost. Thus, for every additional unit of service provided, the cost to provide that service rises at the indicated magnitude. This is expected when treating Medicare patients. The $\alpha-$ value (level of significance) indicates whether these relationships are statistically significant, (where $p = .05$). That is, what probability exists that the correlation is weak or erroneous? The smaller the observed $\alpha-$ value, the stronger the case for the observed correlation value.

Conversely, negative values indicate a negative or inverse relationship. This indicates that for each additional unit of service provided the cost to provide that service decreases. Again, the $\alpha-$ value (level of significance) indicates whether these relationships are statistically significant.

Independent Variables	Ind Patient Cost	α
Patient Category (PtCat)	.812	>.0001
Total Surgical Services	.624	>.0001
General Surgery	.741	>.0001
Cardio-Thoracic	.773	.0012
Neurology	.785	>.0001
Ophthalmology	-.723	.0025
Oral Surgery	.637	.0021
Otolaryngology	.784	>.0001
Plastic Surgery	.711	>.0001
Urology	-.683	.0015
Peripheral-Vascular	.808	>.0001

Table 2-3: Correlation of Variables

Additionally, these correlations may indicate more than patient category influence. The influence of physician practice patterns, hospital policy and primary patient category seen per clinic service may also be indicated in these values. Additionally, there are several confounding values that may require additional research. For instance, Urological Surgery has a patient cost correlation of -.683 and an $\alpha-$ value of .0015. It is expected that surgical costs would increase as more patients are treated, particularly Medicare patients. However, the negative or inverse correlation value, in this case, indicates otherwise. This may be a function of economies of scale. That is, certain surgical services may actually experience, in the aggregate, lower cost per procedure as the total number of procedures increases.

Inferential Statistics

Patient Category is a primary interest in the study and is binary (Medicare vs. Not Medicare) in nature. Therefore, a One-way Analysis of Variance (ANOVA) was performed to determine the amount of variance in individual patient cost is explained by patient category. Results of the One-way ANOVA indicate that 15.7 percent [TR_C $F(1,2999) = 8.253$, $p > .0001$] of the variance in patient cost is accounted for by patient category. Application of the observed test ratio (TR_C) of 8.253 to the critical test ratio, $F(1,2999) = 4.27$, $p > .0001$, supports rejection of the null hypothesis and acceptance of the alternate hypothesis.

Due to the number of clinical service variables in the study, techniques of the Hierarchical Multiple Linear Regression model were used to test whether each independent variable or set of variables specified in the model makes a contribution to explaining the variance in individual patient cost. The regression equation is as follows, where Y_1= Individual Patient Cost, X_1= patient beneficiary category, $X_2 \ldots X_{10}$ = clinic services, a = the value of $Y_1$when X_1

through X_{10} are zero (y intercept) and $b_{1..10}$ = slope associated with its corresponding independent (X) variable:

$$Y_1 = a+b_1X_1+b_2X_2+b_3X_3+b_4X_4+b_5X_5+b_6X_6+b_7X_7+b_8X_8+b_9X_9+b_{10}X_{10}$$

Including all independent variables in the regression model to control for confounding effects, each individual independent variable (clinic service) was removed, in turn, to determine the unique variance in individual patient cost, (see Table 2-4). Results indicate that clinic services account for 19.3 percent of the variance in individual patient cost.

	R Coeff Restricted	R Squared	df1	df2	F	α (Sig)
			Individual Patient Costs ($)			
General Surgery	.123	.015	2	2998	3.506	.003
Cardiology	.224	.050	2	2998	17.32	>.0001
Neurology	.110	.012	2	2998	2.637	>.0001
Ophthalmology	.130	.017	2	2998	18.553	.005
Oral Surgery	.114	.013	2	2998	2.117	>.0001
Otolaryngology	.123	.015	2	2998	13.376	>.0001
Plastic Surgery	.145	.021	2	2998	5.837	>.0001
Urology	.184	.034	2	2998	12.276	.0021
Periph-Vascular	.126	.016	2	2998	2.576	>.0001
		.193				

TR_C or F df(2,2998) = 5.79 with p<.05

Table 2-4: Hierarchical Multiple Linear Regression Of Patient Category & Specialty Clinic

The full model (application of patient category and clinic services to the regression model) yielded a shared variance of 67.8 percent, F(10,2990) = 13.125, p >.0001, for individual patient cost; fairly predictive findings. This indicates a great deal of explained deviation between the mean of each independent variable and the observed values of the dependent variable.

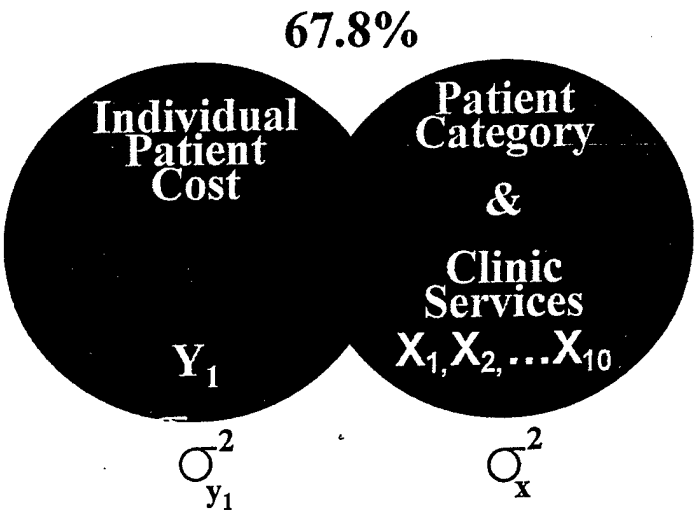

Figure 2-4: Overall Shared Variance

When the observed F-Test value (TR_T F(10,2990) = 13.125, p >.0001) is applied against the critical test ratio, (TR_C F(10, 2990) = 5.27, p <.05), rejection of the null hypothesis and acceptance of the alternate hypothesis is supported.

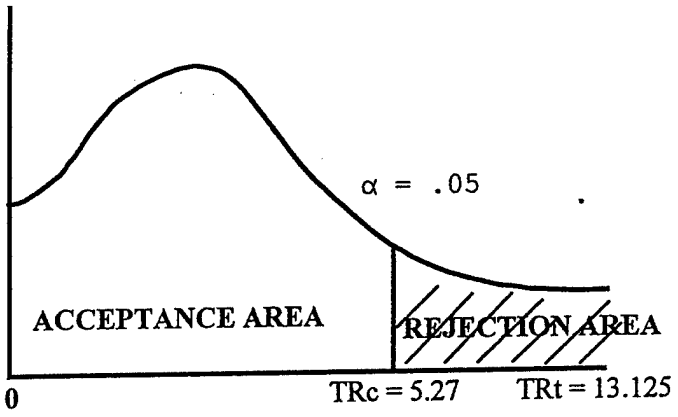

Figure 2-5: Test for Rejection OR Failure to Reject the Null Hypothesis

Discussion: Objective I

The findings of the retrospective, non-experimental research executed in this objective indicate that predictive factors exist for estimating the impact of patient category, namely

Medicare patients, and used clinic services on individual patient cost. The findings support the contention that individual costs for Medicare patients are greater than those for all other patients in military medical treatment facilities. The results are consistent. Previous research indicates that the mean individual cost for Medicare beneficiaries may be as much as 6 percent greater than for other beneficiaries.

The results may have been influenced by the fact that the number of Medicare patients represented in the data is significantly less than all other patients. However, it can be reasonably assumed that if more Medicare patients are seen, costs would actually increase, further supporting the alternate hypothesis.

Additionally, there are inconsistencies in the data due to the different data sources (MEPRS, CHCS/ADS, CEIS) and single user input of medical case data into health management information systems (such as CHCS).

A potential weakness in the study is the low observed values for the Correlation Coefficient (R) and Coefficient of Multiple Determination (R^2). These low values may be the result of multicollinearity in two or more of the independent variables. Additionally, unanticipated relationships shown in the descriptive statistics may also have affected R and R^2.

Due to time constraints, a broader study was not possible. Other statistical tests may be necessary to ascertain the appropriateness of the model. Lastly, more variables could be included in an attempt to account for more of the variance observed in the dependent variables. Also, drawing two equal samples, one for <65 beneficiaries and one for >65 beneficiaries, may provide greater consistency and accuracy.

The information and method presented in this study may assist healthcare administrators and providers in understanding the significance between patient category, clinic services, and

patient costs; potentially empowering them with a tool to gain the knowledge and ability to control the associated costs.

Future research is recommended and encouraged to predict future costs. With improved consistency in the data sources over time, a prospective study is possible and recommended.

Method: Objective II

The format of the model used provides information relevant to the department service level, as well as, to the facility level. Examining the information is simplified by the model's structure. The information is stratified by department/service and by in- and out-patient workload; allowing use of the model by decision-makers at all levels.

The activity-based costing model was developed to serve as the basis for comparing MEPRS dollars spent by MAMC in the delivery of health care to the potential Medicare "revenue" generated, and for evaluating MAMC's ability to meet its assigned LOE; ($26,252,332). The activity-based costing model incorporates current costing methods used by military medical treatment facilities against a calculated output (in dollars), and then measures that output against an estimated reimbursement ("revenue"). The basic format of the model is shown in Figure 2-6.

MEPRS OP Code	Clinic	MEPRS O.P. $	ADS Total Clinic Vis.	MEPRS AWU	ADS 65+ Visits	ADS % 65+ Visits	Medicare OP RWP	Cost per Clinic Visit	Medicare O.P. Cost$	Medicare OP Rx $	Total Medicare OP Cost $

MEPRS IP Code	Service	MEPRS I.P. $	CEIS Total Disp	MEPRS RCFA CMI	CEIS 65+ Disp	CEIS % 65+ Disp	Medicare IP RWP	Cost per Svc Disp	Medicare I.P. Cost$

Medicare Total Costs $ - Rx	Medicare Total Costs $ + Rx

93% AAPCC Medicare Part A for MAMC	93% AAPCC Medicare Part B for MAMC	Total Potential Reimbursement Per Enrollee	Projected TSP Enrollees for FY99	Potential Total Medicare Revenue	Total Medicare Costs $ Over the LOE	Medicare Profit/(Loss) to MAMC	Total Medicare OP Pharmacy Costs $	Total Medicare Profit/(Loss) to MAMC

Figure 2-6: Objective II Medicare LOE Estimate Model Format

Using MEPRS Out-patient cost data, CHCS/ADS and CEIS encounter data, the product of clinic visits, ambulatory weighted units (AWU) and > 65 workload per clinic service results in the >65 out-patient (OP) relative weighted product (RWP) for a particular clinic service. The product of MEPRS out-patient costs and > 65 workload provides the Medicare out-patient costs per clinic service or group of services. Out-patient pharmacy costs are shown as a means of identifying an expense neither covered by Medicare nor included in LOE calculations, and yet a true cost. Lastly, the sum of the Medicare out-patient costs and out-patient pharmacy costs represent the total Medicare out-patient costs.

Using MEPRS In-patient cost data and CEIS disposition data, the product of dispositions and HCFA case mix indices (CMI) results in the Medicare in-patient (IP) relative weighted product (RWP) for each clinic service or group of services. Medicare in-patient cost per service disposition is provided by the product of total MEPRS in-patient cost and the percentage of > 65 dispositions. The product of dispositions and the HCFA CMI provides an Medicare in-patient RWP. Data for in-patient care rendered by service line is reported in dispositions (Disp) for this objective. The product of the cost per disposition and the Medicare dispositions provides the Medicare in-patient costs for each clinic service or group of services and, ultimately, the total Medicare in-patient costs.

Total Medicare costs are then summarized with and without out-patient pharmacy costs. The adjusted AAPCC rates (93% of the 1999 rates for Pierce County Washington) for Medicare Part A and B are then applied, yielding the potential in- and out-patient reimbursement "revenue" for a specific clinic service or group of services, and MAMC as a whole, (see Appendix B-1; HCFA 1999 Medicare+Choice Monthly Capitation Rates for Counties in Washington).

If the model indicates that LOE is met (or exceeded), the adjusted AAPCCs for both out-patient (Part B) and in-patient (Part A) services are added to provide a total potential reimbursement per Medicare Subvention/Tricare Senior enrollee. The product of the total potential reimbursement per Medicare Subvention/Tricare Senior enrollee and the projected number of Medicare Subvention/Tricare Senior enrollees provides a potential total Medicare reimbursement (revenue) to MAMC. Any Medicare costs exceeding the LOE are subtracted from this potential reimbursement resulting in a "profit" or loss. Total Medicare out-patient pharmacy costs are then added to any resulting "profit" or loss, providing the total "profit" or loss to MAMC.

If the Medicare total (in- and out-patient) costs are equal to the established LOE, then cost-neutrality is achieved. If a difference exists, the difference is evaluated in terms of either profit or loss. Either way, cost-neutrality is not achieved.

Application and Results: Objective II

For this objective, retrospective data were provided by the Resource Management Division of MAMC. The data samples were drawn from FY98 workload records in MEPRS, CHCS/ADS and CEIS. MAMC recorded 10,014 dispositions and 907,684 out-patient clinic visits in FY98. The data were arrayed in MicroSoft Excel to execute the model discussed above. Refer to Appendix E-1 and -2 for the complete model applied to the sample data.

Total Medicare costs (excluding out-patient pharmacy costs) equal $32,126,026. Thus, MAMC exceeded its assigned LOE by $5,873,694. Assuming MAMC receives the $1,424,868.11 in reimbursements, when the total Medicare out-patient pharmacy cost of $8,136,700, (not included in the computation of achieved LOE nor Medicare reimbursable), is added to the gross loss of $4,448,826, the net loss equals $12,585,526.

Discussion: Objective II

MAMC's annual LOE is $26,252,332. According to the model, MAMC exceeded this LOE by $5,873,694. Thus, cost-neutrality was *not* achieved, and MAMC is potentially entitled to receive a reimbursement of $1,424,868 (see Appendix E-2 for calculations) from HCFA. Medicare interim payments/ reimbursements were not considered in the model. However, if MAMC received more than $1,424,868 for this fictional year, any surplus must be returned in accordance with the Medicare Demonstration - Memorandum of Agreement.

A loss possibly indicates that the medical center is either providing care to dual-eligible beneficiaries inefficiently or historical appropriated funding levels have dropped to such an extent that the MTF is unable to recover the costs associated with caring for dual-eligible beneficiaries. A loss may also indicate that the LOE is either over- or under-stated (GAO, Sep 1998). Lastly, the reimbursement rates may, very simply, be too low. That is, poorly adjusted to account for the military unique challenges faced by the MTFs participating in the demonstration. The model has a positive aspect. It may serve as a tool MTF staff and decision-makers may use to identify potential inefficiencies or utilization management problems in the MTF that may require more detailed investigation and analysis.

CHAPTER III: DISCUSSION

General

The intent of this research effort was to determine if Madigan Army Medical Center can realistically expect to achieve cost-neutrality under the Medicare Subvention/Tricare Senior Demonstration program. Inherently, the assigned LOE must be attained if MAMC wishes to succeed in the demonstration and achieve cost-neutrality. Results of Objective II indicate MAMC will meet and exceed its assigned LOE, but will not achieve cost-neutrality.

Additionally, any cost avoidance achieved through receipt of interim reimbursements will, in all likelihood, be negated by soaring pharmacy costs, (as illustrated in the model from Objective II).

The task is daunting. The application of Objective I revealed that predictive factors are associated with individual patient cost. The findings support the contention that costs for Medicare patients are significantly greater financially than those for patients under 65 years of age provided care in MTFs. The findings are consistent with the results of similar studies discussed in the literature review.

MAMC is not expected to achieve success in this demonstration project. The AAPCC for this region is too low, and is further adjusted to, at most 93 percent, and as little as 68 percent of the allowable costs for care. United HealthCare concluded that, "the demonstration is probably not financially feasible in Seattle and only marginally feasible in San Antonio, due to low AAPCC rates," (United HealthCare, 1996). Additionally, a Medicare pharmacy benefit is not available to standard Medicare beneficiaries, yet Tricare Senior Prime enrollees will enjoy the best that each benefit plan has to offer.

Presently, the managed care environment in the Military Health System is full of constraints: Enrollment Based Capitation (EBC) and the challenge of the "Fully Covered Life"; the budget decrements which confound the loss of personnel and the loss of buying power; and, of course, Medicare Subvention (TSP) and the unresolved issues surrounding interim payments, and LOE.

The LOE estimate model provides MTFs participating in the Medicare Subvention project the ability to quickly and easily look at a given point in time and determine if the organization is achieving its established LOE, as well as, whether the organization is doing it efficiently. The model may be used to gain a quick estimate of how well an MTF is performing under the

Medicare Subvention Demonstration. Departments and services in MTFs may evaluate their detailed financial, operational and clinical performance with other MTF activities and peer groups. Benchmarks may be established for each service line, allowing commanders to target operational and clinical areas for improvement. This allows the identification, establishment and measurement of service line performance goals as they relate to Medicare Subvention.

Issues

The goal of the Medicare Subvention demonstration is to provide health care in military medical treatment facilities to Medicare dual-eligible beneficiaries with an increase in cost to neither HCFA nor DOD through the transfer of federal funding from one agency to another. The Tricare Senior project will fail financially based on the current reimbursement/payment rate arrangement with HCFA, the lack of a Medicare pharmaceutical benefit and the current number of enrollees in the program.

MAMC officially started to providing care under the Medicare Subvention/Tricare Senior Demonstration on 1 September 1998. Budgets are revised on a monthly basis because providing care to the Medicare dual-eligible population appears to cost more than anticipated. Another factor not taken into consideration are the changes to HCFA regulations and Medicare benefits under the Balanced Budget Act of 1997. As of the end of October 1998, MAMC was the only site to reach its enrollment goal. Other sites are asking for an expansion of zip codes (which will also change the LOE for that site).

Insufficient Enrollment Ceiling

The Medicare Subvention/Tricare Senior demonstration established its own enrollment base for each MTF. Aging-in of those individuals enrolled in TRICARE Prime at the participating MTF is authorized under law. A waiting list was established for each site.

MAMC's enrollment goal was 3,300. This goal was reached in the first week of the enrollment period in August 1998. A waiting list of 1,800 available slots was established. If the waiting list becomes exhausted and the 3,300 enrollment base starts to decline, then an open enrollment period may be offered. Approximately 25-30 TRICARE Prime beneficiaries who reach the age of 65 each month will be offered the opportunity to enroll in TSP (Aging-in). It is anticipated that most will enroll.

How many dual-eligible beneficiaries should MAMC initially have enrolled in the TRICARE Senior Prime Demonstration? The number of beneficiaries enrolled in any Medicare at-risk HMO is vital to the financial success of an organization. The maximum number of enrollees that an organization may enroll is 50 percent of the number in its commercial HMO. TRICARE Prime is considered the commercial HMO equivalent for TSP. MAMC's beneficiary enrollment in TRICARE Prime is approximately 48,000. Did MAMC enroll an adequate number of dual-eligible beneficiaries to have a financially sound program?

Data on Medicare at-risk HMOs regarding enrollment and how many to enroll was not available after a diligent search. Articles did infer that, although some local plans had as many as 10,000 enrollees and were enrolling 400-800 new beneficiaries each month, administrative costs were not covered under the 1876 rules (pre-Act) (Terry, 1997). Additionally, all aspects of the enrollment figure must be analyzed, which includes financial data and projections.

Another aspect is the demographic qualities of enrollees, which will impact the demonstration. The impact may or may not be negative depending on the medical care needed by each enrollee and the cost for that care. Risk factors and other adjustments for Medicare reimbursements are region/county specific based on demographic qualities of the Medicare dual-eligible population.

Insufficient enrollees is a basis for failure. Voepel (1999) conducted a comparison of the actual enrollment to actual funds transferred (monthly payments by HCFA) versus costs and restrictions performed. According to Voepel, Madigan Army Medical Center should have initially enrolled 3,600 beneficiaries in the demonstration on 1 September 1998, instead of 3300, in order to realize positive monthly cash flow earnings. In order to ensure continued positive cash flow, Voepel recommends the enrollment goal for the end of the demonstration be set at 6,325 (Voepel, 1999). Instead the end state goal is forecast at only 4,003. Enrollment ended in November 1998 and another enrollment phase is not anticipated.

Level of Effort

Besides providing all care for the enrolled dual-eligible, OASD(HA) agreed to meet a LOE, (based on 1996 workload data for care rendered to this beneficiary group), prior to retaining any reimbursements from HCFA. Reimbursement of funds will only take place after the LOE is met. A caveat regarding the LOE is that all sites must reach this minimum threshold or all reimbursements from HCFA must be returned to HCFA. Additionally, reimbursements are capped at $50 million per year (cumulative) for all demonstration sites. Thus, after the $50 million per year reimbursement ceiling is reached, all other costs for the remainder of that year are the burden of each participating MTF or parent service.

Schedule of Payments

Voepel (1999) also determined that another basis for failure is that the schedule of payments for MAMC is substantially lower than those for other Medicare at-risk HMOs in the area ($283.66 vs. $435.00). According to Voepel (1999), MAMC may loose $7 to $8 million dollars over the 28 months of the demonstration. The model presented in Objective II of this research effort indicates that this much may be lost in the first 12 months of the demonstration.

It is recognized that not all data or factors that may have an impact on the demonstration are available for analysis. Although the demonstration may fail financially at the onset, additional funding or modification of the agreement may be forthcoming by the end of the year 2000.

Signals from the Managed Care Market

The majority of recent (within the last year) related literature addresses the dilemmas of staying in, getting in, or withdrawing from the Medicare at-risk HMO program. Grabbing the headlines are the doom and gloom stories concerning the BBA of 1997. The BBA will affect, in some way, Medicare beneficiaries and those who provide medical care to this population. Beneficiaries who seek care through a fee-for-service option are presently paying hospitals 50 percent of the cost for outpatient services instead of the usual 20 percent co-payment. This is due to an accounting error. The BBA will change this by making the hospitals responsible for the difference of 30 percent. Medicare will not raise its reimbursement rates to hospitals. Hospitals are looking at a deficit of at least $570 million per year. But due to the potential Y2K problems, HCFA will not implement this part of the BBA until 1 April 2000 (Weissenstein, 1998).

Major managed-care organizations (usually large insurance companies or hospital-based systems) are abandoning the Medicare At-risk HMO market (as of 1 January 1999 when compliance to the Medicare + Choice officially took effect) in some counties with low reimbursement rates or withdrawing from the state entirely. This is primarily due to the new reimbursement rates established by the BBA which will shift money from some urban areas to rural areas. "Aetna's Blue Bell Program will leave approximately 58,000 Medicare risk enrollees stranded in nine states and the District of Columbia. Foundation Health System (FHS) said its decision to drop coverage for five counties in its Northeast division will affect 8,000 enrollees. FHS said Medicare reimbursement in these five counties averages $417 per enrollee, compared

with an average monthly rate of $623 per enrollee in New York City (Rauber, 1998)." The decrease in the monthly reimbursement rates will tend to degrade the extra benefits that beneficiaries have come to expect and demand from HMOs, such as eye glasses and hearing aids. Many large health care corporations are attributing second- quarter (1998) deficits ($508-$900 million) on the provision of care to the Medicare population without proper reimbursement. Anthem Blue Cross and Blue Shield (Cincinnati-based) is facing a class-action lawsuit and an Ohio State Department of Insurance investigation for announcing the elimination of its Medicare HMO plan from 22 rural and suburban counties in Ohio (Jaklevic, 1998). Beneficiaries are facing Medicare fee-for-service costs and buying supplemental (Medigap) insurance.

Full at-risk HMOs for Medicare beneficiaries were established as an option under the TEFRA of 1982 beginning in 1985. By 1996 there were 202 risk contractors which represented 45 percent of all HMOs. Sixty-three (63) percent of all HMOs in 1996 did not have a member premium. In 1987, zero premium plans were only available in four metropolitan areas. In 1996, 20 percent of projected Medicare payments were returned to beneficiaries in the form of reduced premiums and/or additional benefits. $4 billion of $20 billion in projected annual Medicare payments to risk HMOs will be used for enhanced benefits (Zarabozo, Taylor, and Hicks, 1996). But what shall the military Medicare at-risk HMO do, when it must provide the best of both programs; Medicare and TRICARE Senior Prime? Ninety (90) percent of the time, TRICARE offers equal or better benefits than does Medicare, namely the pharmacy benefit. However, pharmaceuticals are neither covered by Medicare nor included in the computation of the LOE. So, what components of the Medicare Subvention/Tricare Senior Demonstration should be controlled or influenced by OASD(HA) and the MTFs participating in the demonstration?

Controllable Components

This section addresses these controllable components: Level of Effort, Enrollment, Medicare+Choice (M+C) payment schedule rates and the Medicare Subvention Payment Schedule. These represent those components OASD(HA) can influence in order to enhance the delivery of the Medicare/TSP benefit to dual-eligible beneficiaries, and ensure the equability of the financial burden on the MHS.

Level of Effort

One of the most controversial components of the Medicare Subvention/Tricare Senior Demonstration project is Level of Effort (LOE). LOE for the entire demonstration is based collectively on all six sites. That is, all six sites must, at a minimum, spend the amount of money budgeted (not necessarily spent) on Medicare dual-eligible beneficiaries during fiscal year 1996. For FY 96, the total amount that was allocated to treat these beneficiaries was $170,460,115.

MAMC's assigned LOE is $26,252,332. $26,252,332 was budgeted, but not necessarily spent, for this population in FY96. It also assumes this amount was and still is budgeted every year after FY 96. There is no evidence nor hard data to support this assumption. Actually, the opposite may be true. MTF Budgets have been declining since 1992. Prior to TSP, all 65+ retirees and their eligible family members (not necessarily Medicare eligible) were treated as Space-A recipients of care in MTFs. If appointment were available, whether for primary or specialty care, then beneficiaries were seen. If not, beneficiaries were directed to call back for an appointment at some future date, seek treatment on the economy at their own expense, or under their Medicare benefits plan. Although promises were made, no law or statute stipulates that medical care is a lifetime benefit for retirees. Federal courts have upheld the interpretation that care for dual-eligible beneficiaries within an MTF may be denied because they are eligible for

another federally funded program at the age of 65, Medicare.

LOE is further broken down by month and category of recipient; TSP or Space-A. The monthly LOE that must be spent on TSP enrollees during the first 10 months of the project is $0.655 million. This means that $1,528,333 must be spent each month on Space-A dual-eligibles to attain the monthly LOE total. If MAMC spends more than the established minimum on TSP enrollees, this amount may be credited toward the Space-A portion of the LOE. If the amount spent on Space-A care exceeds the $1.528 million, the excess is not credited toward achieving the LOE, and MAMC absorbs the cost for this care if the care meets Mediare/TSP requirements. MAMC's objectives are to: exceed the monthly percentage of the LOE spent on TSP enrollees; minimize the amount spent on Space-A dual-eligibles; and retain all interim payments. Recall, however, that one of the demonstration project goals is to achieve cost neutrality.

Obstacles are intertwined in the LOE agreement. The agreement requires the minimum amount spent on TSP enrollees to increase at regular intervals and the maximum amount spent on Space-A to decrease in proportion. During the second 10 months of the demonstration the amount increases to 40 percent for TSP and decreases to 60 percent for Space-A. During the last nine months the ratio is 50 percent for each.

Another problem that arose out of the OASD(HA)/DHHS negotiations is the definition of Space-A care. In the past, when care could not be provided (lack of specialty care), Space-A candidates (that is any eligible beneficiary, no matter what age, not enrolled in an MTF) were sent to a civilian network provider. Some of the cost was absorbed by the MTF using other funds. For the TSP demonstration, Space-A care is defined as only that care given at an MTF. But it does not necessarily have to be care provided at the approved TSP site. If an approved demonstration MTF and a non-demonstration MTF share counties (or zip codes) in a catchment

area, then any Space-A dual-eligible costs from those shared counties are credited toward the annual LOE accrual.

MAMC and Naval Hospital (NH) Bremerton share HCFA approved counties in each of their catchment areas, thus some Space-A LOE costs may be shared by NH Bremerton. The problem that MAMC and all other demonstration sites face with this issue is that MTFs are reducing Space-A appointments to increase the number of appointments available to TRICARE Prime beneficiaries, thereby decreasing costs (to the MTF) for the this beneficiary group. There are virtually no primary care clinic appointments available at NH Bremerton for any Space-A dual-eligible beneficiaries. The number of specialists and specialties at NH Bremerton are limited. Thus, specialty appointments at MAMC also become limited for TRICARE Prime beneficiaries. On 1 November 1998, MAMC decided not to schedule or provide any Space-A eligible beneficiaries with advance appointments in the Adult Primary Care Clinic or Family Practice Clinic as of 30 November 1998. Space-A dual-eligible beneficiaries now must call after 10:00 a.m. to attempt getting an open appointment available that day. Specialty care appointments are still available to Space-A dual-eligibles due to the number of Graduate Medical Education programs (training of interns and residents). MAMC is limiting Primary Care Space-A access to ensure TSP enrollees may obtain an appointment within the access standards developed and delineated by OASD(HA) for all enrollees at an MTF.

One of the more devastating constraints in the agreement is that certain services (as a covered benefit) and their costs are not included in the computation of achieved LOE. The largest is the cost of pharmaceuticals. Although TSP enrollees have the out-patient pharmaceutical benefit, as do TRICARE Prime enrollees and all other eligible military beneficiaries, the out-patient pharmaceutical costs generated by TSP enrollees and non-TSP dual-

eligibles, (who use an MTF pharmacy for the majority of their prescriptions), are not credited toward the LOE accrual. The exclusion of pharmaceutical costs is in keeping with the current Medicare benefit unless they are not self-administered. Medications administered during an office visit are part of the office visit billing and not counted separately under Medicare rules.

Another cost that may not be included in the LOE accrual is Graduate Medical Education (GME), as it relates to the training of interns and residents. The Medicare+Choice plan, effective 1 January 1999, will phase-out adjustments for GME costs for all at-risk HMOs over a five year period. MTFs with GME programs are given additional appropriated funds (although shrinking) each year by OASD(HA). HCFA now excludes GME costs from both LOE calculations and reimbursement/interim payments. In truth, the funds budgeted for GME programs are distributed to the military services to disburse as each service chooses. Equitable division of these funds between sites is not likely.

The Per Member-Per Month (PMPM) interim payments for any at-risk HMO are based on 90 percent (as of 1 January 1999) of the fee-for-service costs in the counties serviced. If the average fee-for-service cost is $500 per month per beneficiary, then the at-risk HMO would receive $450. In counties MAMC serves, at-risk HMOs receive $435 PMPM (based on the 1999 payment schedule). As noted above, certain benefits/costs are not included in the computation of LOE or PMPM payments. Thus, the maximum amount of the interim payment to any participating site is 60 percent of the fee-for-service costs of any particular county served. The PMPM-based interim payments for MAMC are presently set at $283.33.

Another factor that impacts the actual PMPM payments made by HCFA is the CHAMPUS Maximum Allowable Charge (CMAC). The CMAC rate is the most a civilian provider may bill the Military Health System per federal law. The CMAC is usually much less (sometimes 50

percent less) than what a civilian at-risk HMO or a private citizen would pay for care. This creates a disincentive for civilian providers to either accept CHAMPUS assignment or provide services to military health care beneficiaries.

For all Medicare at-risk HMOs there is a Reconciliation Period between HCFA and the specific HMO. This is a balancing of the books to determine what the HMO was paid and what the HMO should have been paid. Other than the PMPM payment, HCFA very seldom reimburses HMOs for care provided.

During the reconciliation period, all six demonstration sites are examined as one HMO to determine if the LOE was met, not met, or exceeded. The reconciliation for 1998 will only cover 1 September through 31 December 1998, and may be resolved as early as the end of April 1999. For this first reconciliation period, two sites will not be considered; Dover and Colorado Springs. These MTFs were not providing health care as an at-risk HMO until the first week of January 1999. The other four sites will be evaluated on the basis of when they started the delivery of health care. This may aid MAMC in keeping the PMPM interim payments for the first period of the demonstration, since the total MHS LOE for the first reconciliation period will be low. The fact that the other three active demonstration sites have not reached their enrollment capacity is a drawback. MAMC meeting or exceeding its LOE may not suffice.

A Risk Adjustment may be accomplished during the Reconciliation Period, as well. This adjustment is based on the health (perceived and real) status of the enrolled population as compared to the general Medicare population in the same geographical area. This an analytical determination accomplished solely by HCFA. In addition to cost factors and indices of severity, the risk adjustment is also based on comments from the Medicare population. This is accomplished through an annual survey.

Potential implications for the demonstration and the individual sites are an increase or decrease in the PMPM payment schedule. It is expected that the HCFA PMPM payment to MAMC will remain capped (top end) at $283.66, with the likelihood of a drop to $261.00 or lower before the end of the demonstration, (Voepel, 1999).

It is important to note that no other Medicare at-risk HMO has a special agreement with HCFA defining what is reimbursable, what is a benefit, or that a LOE must be attained (based on historical data) prior to retention of any interim payments. The advent of the Medicare+Choice regulations on 1 January 1999, enacted a decrease in the interim payment amount of 5 percent; from 95 to 90 percent. Due to of this major changein the program, many at-risk HMOs are insolvent and exiting the market.

Enrollment

Although LOE is a critical factor in the success of the demonstration, another component that can determine the project's success is enrollment levels. As noted previously, only MAMC has reached its target of 3,300 enrollees with an initial waiting list of 1,400. As of 1 November 1998, the enrollment period was closed at MAMC. Thus, new applications are not presently processed for the waiting list. The same screening measures applied to the first 3,300 enrollees are applied to potential enrollees from the waiting list when openings become available. There is a time lag of 30-60 days. During this time, care received by the individual in a civilian network is partially covered by the gaining HMO, but care received within the MTF is counted toward the Space-A portion of the LOE. Additionally, only a partial PMPM payment is received.

The guiding principle HCFA uses to determine the allowable total enrollment is that an at-risk HMO may have no more than 50 percent of its total managed care population as Medicare beneficiaries. There are complicated formulas that arrive at this factor based on access, health

status, and services available. However, the following illustration is the easiest way to understand this concept. If an HMO has 100 enrollees in a regular managed care plan providing care for ages up to 64, then the HMO may establish a Medicare at-risk HMO for only 50 enrollees. TRICARE Prime is the MHS version of a managed care HMO. Therefore, the maximum TSP enrollment is based on the TRICARE Prime population at each participating demonstration site. TRICARE Prime is also a multi-faceted HMO (providing more than one avenue to obtain care, either through the MTF or civilian network). Thus, by general agreement, the at-large Medicare dual-eligible population is based on enrollment at the MTF (those who agreed to receive care only through the MTF). MAMC has an enrollment of 26,000 Tricare Prime beneficiaries. Thus, MAMC has a TSP enrollment ceiling of approximately 13,000 Medicare dual-eligible beneficiaries.

MAMC based its decision to enroll only 3,300 in TSP on the number of enpaneled beneficiaries (3,600) prior to the start of health care delivery under the demonstration. The 3,600 beneficiaries enpaneled were: over 65 years of age; eligible for care (retirees, not necessarily dual-eligible status); and received care on a routine basis in one of MAMC's primary care clinics. It was determined that approximately 300 of the 3,600 beneficiaries would not qualify for care under TSP. Therefore, the initial enrollment ceiling was capped at 3,300.

"Aging-in" of TRICARE Prime enrollees into TSP added another 108 TSP enrollees as of 31 December 1998. "Aging-in" is a HCFA requirement that allows Medicare eligible beneficiaries over 65 years of age to transition from a managed care HMO to an at-risk HMO if the HMOs are managed by the same commercial corporation. OASD(HA) manages both. The transition is seamless provided the member applies for and meets the same requirements as the original 3,300 enrollees. The "Aging-in" rule does not apply to the 3,300 initial enrollees. The

average number of beneficiaries "aging-in" is forecast at 25-30 per month.

As did all Medicare at-risk HMOs, MAMC experienced adverse selection. The majority of beneficiaries with higher health care needs select HMOs; HMOs require less out-of-pocket expenses paid by the enrollee. Those beneficiaries with fewer medical needs desire freedom of choice and are willing to absorb a higher cost share through a fee-for-service Medicare plan. Since 1989, favorable selection rates have decreased, and by 1992 all but disappeared, despite the fact that beneficiaries can transition to an at-risk HMO (Grimaldi, p 13).

Results of this adverse selection were demonstrated during the first week of the demonstration at MAMC. One enrollee needed "emergency" coronary artery bypass graph (CABG) surgery at a civilian hospital following a heart attack, (TSP beneficiaries, as well as all Medicare beneficiaries, are not obligated to use the facility at which they are enrolled for emergency care). Two enrollees were placed on the liver transplant list and received extensive work-ups at the University of Washington Medical Center prior to expiring from the illness.

Another form of adverse selection is represented by the significant number of TSP enrollees who do not live in the MAMC area all year, thus devaluating the managed care basis of the HMO. Under new HCFA regulations, an enrollee may reside out of the area for up to one year, however, "the Plan" must continue to cover the cost of urgent and emergent care.

It is forecast that a majority of the care sought by this mobile population would be handled on a routine basis at the MTF. Since they are out of the area, these enrollees have the right to define their "urgent and emergent" health problems. It is a virtual certainty that the cost for this care will increase over time.

A typical example is an enrollee with end stage renal disease (ESRD) who routinely requires renal dialysis. In the past, the enrollee was required to coordinate care with "the Plan",

prior to departing the area, if the dialysis was anticipated while out of the area. As of 1 January 1999, the enrollee no longer need coordinate care prior to departing. HCFA now deems dialysis an urgent condition. Consequently, HCFA requires "the Plan" to entirely cover the treatment (no co-payment charges to the beneficiary), provided the treatment is done at a Medicare-certified dialysis center. This also holds true for preventive services to which beneficiaries are entitled. Although encouraged to contact a network provider to receive preventive health services, the beneficiary is not required to do so. Thus, the cost for these services, over time, will also rise.

Medicare + Choice Payment Schedules

Although the Medicare + Choice (M+C) Payment Schedules are controlled by HCFA (determination of reimbursements paid), they are a component that may be controlled by the participating HMO. The reasoning follows that the HMO will be able to choose the method of payment by which it will be reimbursed. MTFs participating in the demonstration do not have this option. An amendment to the current Medicare Demonstration of Military Managed Care Memorandum of Agreement is required. The three new payment schedules, (to be implemented in 1999), are the blended rate, the minimum rate and the minimum percentage increase rate.

The blended rate is a weighted average of the specific area served (fee-for-service model) and a national (federal) payment amount (the USPCC). Area specific capitation rates will be capped at 90 percent plus 10 percent of the USPCC payment amount for 1999. The goal of this schedule is to have an even split between the specific area and national payment amounts. This will be accomplished by shifting eight percentage points per year to the national payment amounts until a 50/50 split is obtained in five years. This schedule will not be implemented in 1999 because it would exceed the limitations established by the BBA. The blended schedule will be extremely beneficial to rural areas.

The minimum rate schedule is a capitation amount received by all areas throughout the nation. One payment fits all. This shifts dollars from the metropolitan areas to the rural areas. The minimum monthly capitation rate for 1999 under this schedule is $367.00.

The minimum percentage increase rate schedule takes the capitation rate from the previous year and increases it by two percentage points. This schedule is intended to decrease at-risk HMO financial uncertainty and prevent these HMOs from exiting the market. Appropriate demographic cost factors are used in the calculation of the capitation rate. This method will help reduce the financial risk to HMOs with low capitation rates and small Medicare populations.

According to the agreement between DHHS(HCFA) and OASD(HA), the schedule used to determine capitation rates, is a pre-Balanced Budget Act model (which includes the Patient Level Cost Allocation or PLCA model developed by SRC) in which HMOs receive a fixed percentage of the payment received by fee-for-service models. TSP sites lose reimbursement allowances for graduate medical education (GME) (for which commercial HMOs will receive 80 percent reimbursement for the next five years), indirect medical education (IME), and disproportionate share allowance (DSA). The DSA payment is received because Medicare beneficiaries experience longer Lengths of Stay. Sixty-seven (67) percent of capital expenditures is also disallowed because MTFs receive appropriated funding for capital improvement (although these funds are shrinking as well, even with Y2K on the horizon).

Medicare Subvention Payment Schedule

Although many factors and variables are integral to the success (or failure) of the Medicare Subvention/TRICARE Senior Demonstration project, a major factor coupled with enrollment level is the PMPM payment schedule. Other factors that influence cash flow are LOE, interim payments, estimated claims cost, and the network contract cost.

The initial payment schedule that was proposed for MAMC and agreed upon by OASD(HA) and DHHS(HCFA) before the signing of the memorandum of agreement was $384.32 per member per month. This amount was based on MAMC receiving 93 percent of the amount a commercial at-risk HMO receives in the same geographical area. The fee-for-service schedule is $435.00 per month. An at-risk HMO, other than TSP, receives 95 percent of this amount or $413.25.

CHAPTER IV: CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The findings of the research executed in Objective I indicate that predictive factors exist for estimating the impact of Medicare patients on individual patient cost. Further, the findings support the contention that average individual patient cost for Medicare patients is greater than that for other patients in military medical treatment facilities.

MAMC's annual LOE is $26,252,332. According to the model, MAMC exceeded this LOE by $5,873,694. Thus, cost-neutrality was *not* achieved, and MAMC is potentially entitled to receive a reimbursement of $1,424,868 (see Appendix E-2 for calculations) from HCFA. Medicare interim payments/reimbursements were not considered in the model. However, if MAMC received more than $1,424,868 for this fictional year, any surplus must be returned in accordance with the Medicare Subvention Demonstration Memorandum of Agreement. Assuming MAMC receives the $1,424,868.11 in reimbursements, when the total Medicare out-patient pharmacy cost of $8,136,700, (not credited toward LOE accrual nor Medicare reimbursable), is added to the year's gross loss of $4,448,826, the net loss equals $12,585,526.

A loss possibly indicates that MAMC is either providing care to dual-eligible beneficiaries inefficiently or historical appropriated funding levels have dropped to such an extent that the MTF is unable to cover the costs associated with caring for dual-eligible beneficiaries. A loss may also indicate that the LOE is either over- or under-stated.

Lastly, the reimbursement rates may, very simply, be too low. That is, the rates are not adjusted to account for the military unique challenges faced and expenses incurred by MTFs participating in the demonstration.

The Medicare Subvention/Tricare Senior Demonstration project at MAMC is not financially sound and will not be cost-neutral. The financial implication? The cost of providing health care to this unique sub-population of Medicare beneficiaries has been shifted entirely to the military system, not only without additional funding but as annual operating budgets are shrinking. Based on the experiences and reactions of commercial Medicare at-risk HMOs, if participation in Medicare Subvention is not financially successful, then it should be discontinued.

Recommendations

Adjust the Level Of Effort

OASD(HA) should have insisted on the use of FY98 as the baseline for determining the historical LOE. FY96 is a poor basis for the LOE. The information drawn from the FY96 data was at least three years old when health care under the demonstration started. During this three years significant changes occurred in the MHS: MTF military personnel levels declined, effectively reducing MTF enrollment/treatment capacity; and annual operating budgets shrank (and continue to shrink), diminishing MTF capability to fill the void created by military personnel losses.

Although MAMC continues to provide most of the services it did in FY96 (with reduced staffing), Dover AFB lost its capability to provide hospitalization services in 1997. The LOE for Dover is based on expenses for services no longer offered. FY98 workload and budget data would provide a more accurate and timely accounting of the amount budgeted for the treatment of this specific population.

If the project is expanded to include all Military Health System MTFs following the end of the demonstration (whether "deemed" successful or not), OASD(HA) must negotiate a new agreement. Included in any new agreement should be a provision requiring the LOE to change annually. That is, the Medicare workload from the previous year is used to determine the LOE for the current year.

Appropriately Fund the Defense Health Program and MTF Budgets

Confounding the challenge of implementing and delivering the benefits of the Tricare Senior Project is the FY99 budget shortfall. As of 30 September 1998, the Army portion of that shortfall is $233 million; the MAMC portion is approximately $4.5 million (Jones, 1998).

One obvious solution is increasing DHP, and thus, MTF funding. The MHS operates, in essence, a discretionary budget program within the confines of an appropriated budget world. This fact may never change, however, if it is recognized then the cries for "appropriate" funding may be acknowledged.

Another recommendation to decrease financial risk is to "fence" appropriated funds for the health care expenses of dual-eligible beneficiaries. "Fencing" is the specific earmarking of funds for certain purposes or specific expenses. OASD(HA) can "fence" funds; MTFs cannot "fence" appropriated funds.

Lastly, OASD(HA) should attempt to provide current year funding or reimbursement to account for lagging Bid Price Adjustment reimbursements.

Increase Enrollment Ceilings

The literature review discovered that the minimum number of enrolled Medicare beneficiaries needed in any HMO is 10,000 instead of the 3,300 initially enrolled at the MAMC demonstration site. Rural areas have a difficult time attracting and sustaining HMOs due to small populations and low reimbursement rates.

The process and the basis for determining specific enrollment levels at MAMC appears to have been founded upon neither practical terms nor a scientific approach, but this holds true for commercial Medicare at-risk HMOs as well. The literature review revealed that adverse selection is experienced with the Medicare eligible population. To help estimate the projected costs of covering health care delivered outside the catchment area, the mobility of the Medicare dual-eligible population should be researched.

MAMC should have enrolled 3,600 dual-eligible beneficiaries by 1 September 1998, with a goal of 6,325 by the end of the demonstration, (Voepel, 1999). This may allow positive cash flow for the entire demonstration (without taking into account the network contract). Even with the enrollment at 6,325, the network contract will degrade the financial status.

Additional research is needed to determine MAMC's ability to provide primary care services to additional enrollees within the constraints of the Medicare Subvention agreement.

Revise the Payment Schedule

HCFA revised the payment schedules and allows HMOs to choose the schedule most beneficial to its financial solvency. Demonstration sites do not have this choice. An amendment to the current OASD(HA) and DHHS(HCFA) Memorandum of Agreement is required.

The payment schedule of $283.66 PMPM was apparently dictated by HCFA instead of allowing the minimum payment of $335.00 PMPM for rural areas. Demonstration sites should be compared with rural areas based on population availability instead of geographic location.

OASD(HA) should negotiate a military unique allowance or adjustment for military readiness requirements. HCFA provides commercial at-risk HMOs allowances for many indirect costs. Medicare Subvention/Tricare Senior Demonstration sites are not entitled to benefit from these adjustments. Demonstration sites lose reimbursement allowances for graduate medical education (GME) (for which commercial HMOs will receive 80 percent reimbursement for the next five years), indirect medical education (IME), and disproportionate share allowance (DSA). Sixty-seven (67) percent of capital expenditures is also disallowed because MTFs receive appropriated funding for capital improvement (although these funds are shrinking as well, even with Y2K on the horizon). The rational for discounting these adjustments for participating MTFs is that the annual operating budgets MTFs receive (presumably) account for these indirect costs. MTFs have a military unique mission that commercial HMOs do not; military medical readiness. Military medical readiness requirements pull personnel and material resources from MTFs, therefore an adjustment or allowance is rational.

The TRICARE Senior project is a demonstration to determine if the military can provide quality health care to Medicare dual-eligible beneficiaries at no increased cost to either OASD(HA) or DHHS(HCFA). What better place to determine the feasibility of the new M+C payment schedule models? Each site would be assigned a particular payment schedule based on its population and previous capitation rates. This would not only benefit HCFA in gathering data regarding the adequacies of each schedule, but also (perhaps) OASD(HA) in removing some of the financial risk associated with providing care to this population.

Lastly, HCFA should develop an age-adjusted Case Mix Index (CMI) for the Medicare program to account for the high use and severity of illness presented by Medicare beneficiaries.

A Medicare Pharmacy Benefit

HCFA must consider an adjustment or allowance for pharmaceutical costs or create a pharmacy benefit under Medicare. Among the health care benefits the MHS provides that Medicare does not, is the pharmacy benefit. This benefit is most in demand by military and dual-eligible beneficiaries.

As in the private sector, DOD's pharmacy costs have continued to grow relative to total health care costs. GAO estimates that DOD pharmacy costs increased 13 percent between 1995 and 1997, while overall health care costs increased two percent for the same period (GAO, Jun 1998). Although there are a number of adjustments to the reimbursement rates HCFA will potentially pay the DOD, there is currently no adjustment for the costs associated with the pharmacy benefit.

Execute Additional Research

To determine if the project will be successful nationwide, a study and comparison of all sites should be accomplished prior to the end of the demonstration. This allows OASD(HA) and DHHS(HCFA) to determine if: the demonstration should be curtailed; if the memorandum of agreement needs amended or re-negotiated; and if Medicare Subvention should be implemented MHS-wide, if at all.

Recommend reevaluating the demonstration project at 12, 18 and 24 months to determine if the conclusions remain valid. Other factors to evaluate are: interim reimbursements and PMPM payment schedules; reconciliation for calendar years 1998, 1999, 2000; and cost of the network contract. These factors were not the focus of this research effort.

Negotiate a New Memorandum of Agreement

Simply, OASD(HA) should negotiate either amendments to the existing agreement or a new agreement to address the problems identified in this, and other research efforts.

Closing

Today's dwindling resources, the increased focus on the rising cost of health care and the many new initiatives designed to contend with these political, economic and cultural forces, each present the MHS with unprecedented challenges in the execution of it's health care mission.

The information and methods presented in this study may assist healthcare administrators and providers in understanding the significance between patient category, clinic services, and patient costs; potentially empowering them with a tool to gain the knowledge and ability to innovate methods for controlling the associated costs.

"You think you understand the situation, but what you don't understand is that the situation just changed."

Putnam Investments advertisement

"Many of the problems the world (nation) faces today are the eventual result of short term measures taken last century."

J.W. Forrester

CHAPTER IV: REFERENCES

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MEDICARE DEMONSTRATION OF MILITARY MANAGED CARE

-- MEMORANDUM OF AGREEMENT --

The Department of Health and Human Services (DHHS), the Health Care Financing Administration (HCFA), the Department of Defense (DoD) and the Office of the Assistant Secretary of Defense (Health Affairs) (OASD(HA)) agree to conduct a demonstration project under which DHHS will reimburse DoD from the Medicare Trust Funds for certain health care services provided to Medicare-eligible military (dual-eligible) beneficiaries at a military treatment facility (MTF) or through contracts. This demonstration will be referred to as the TRICARE Senior Project.

TRICARE Senior will consist of two types of health care delivery systems: TRICARE Senior Prime and Medicare Partners. Under TRICARE Senior Prime, the Medicare program will treat the DoD and its Military Health System (MHS) similar to a Medicare+Choice plan for dual-eligible Medicare/DoD beneficiaries. Medicare will pay for dual-eligibles enrolled in the DoD managed care program after DoD meets its current level of effort, measured in terms of health care expenditures for the dual-eligible population. Under Medicare Partners, DoD will receive payment from Medicare+Choice plans under Part C of title XVIII of the Social Security Act with which DoD contracts for inpatient and physician specialty care services provided to Medicare-eligible military beneficiaries who are enrolled with the Medicare+Choice plans.

The goal of this demonstration is, through a joint effort by DHHS and DoD, to implement a cost-effective alternative for delivering accessible and quality care to dual-eligible beneficiaries while ensuring that the demonstration does not increase the total federal cost for either agency.

TERMS OF THE AGREEMENT

The Department of Health and Human Services and the Department of Defense agree to carry out a Medicare demonstration of military managed care under the following terms.

A. TRICARE SENIOR PRIME

1. LEGAL AUTHORITY

This demonstration project is conducted under the authority of section 1896 of the Social Security Act, as added by section 4015 of the Balanced Budget Act of 1997 (P.L. 105-33).

2. SITES SELECTED AND POPULATION COVERED

a. TRICARE Senior Prime will be offered at six sites: 1) Keesler Air Force Base, Biloxi, MS; 2) Wilford Hall Medical Center and Brooke Army Medical Center, San Antonio, TX; Fort Sill, Lawton OK; and Sheppard Air Force Base, Wichita Falls, TX; 3) Fort Carson and the Air Force Academy, Colorado Springs, CO; 4) Madigan Army Medical Center, Fort Lewis, WA; 5) Naval Medical Center San Diego, San Diego, CA; and 6) Dover Air Force Base, Dover, DE. For the purpose of this demonstration, the catchment areas for San Antonio, Fort Sill, and Sheppard Air Force Base will comprise one site.

b. Eligibility for participation in TRICARE Senior Prime consists of people who (during the demonstration):
   - Are covered through Medicare's aged program by Medicare Part A and

Medicare Part B and are eligible for care from DoD as described in section 1074(b) or 1076(b) of title 10 United States Code (i.e., the demonstration excludes Medicare beneficiaries who are disabled or eligible for ESRD benefits),
- Enroll in TRICARE Senior Prime,
- Agree to receive covered services through TRICARE,
- Are residents of the geographic areas covered by the demonstration and where enrollment in the demonstration is offered, and
- Are a dual-eligible who, as a dual-eligible, used a Military Treatment Facility before January 1, 1998, or became dual-eligible starting after December 31, 1997.

c. Participation of Medicare-eligible military retirees or dependents in TRICARE Senior Prime shall be voluntary.

3. SERVICES COVERED AND PATIENT COPAYMENTS

Services covered include the standard Medicare benefit in addition to specific TRICARE Prime benefits. Specific benefits and patient copayments are defined in Attachment A -- "Benefits" to this final agreement as signed by the Secretaries. Patient copayments are also defined in Attachment A. TRICARE Senior Prime enrollees will not be charged a premium during the first year of the demonstration. DoD's intention is not to require a premium in the second or third years of the demonstration unless necessary to maintain cost neutrality. If DoD decides to require a premium, such premium will be subject to HCFA's Adjusted Community Rate (ACR) process.

4. SERVICES PROVIDED

The provision of services for those beneficiaries enrolled in TRICARE Senior Prime is the responsibility of DoD and services are either provided directly by DoD or arranged and paid for by DoD.

5. ENROLLMENT

a. DHHS authorizes DoD to enroll dual-eligible beneficiaries, using TRICARE Senior Prime, in the Medicare demonstration.
b. DoD will offer enrollment to dual-eligible beneficiaries eligible under this demonstration.
c. Enrollees must pay applicable cost sharing and agree that TRICARE Senior Prime will be the exclusive source of health care for enrolled beneficiaries. Beneficiaries who choose to enroll in TRICARE Senior Prime will be subject to all Medicare+Choice requirements, including the "lock-in" provision which prevents plan enrollees from using their fee-for-service Medicare benefits.

6. APPLICATION OF CONDITIONS OF PARTICIPATION APPLICABLE TO MEDICARE+CHOICE PLANS

DoD will meet the applicable requirements of a Medicare+Choice plan. The TRICARE Senior Prime requirements are defined in Attachment B of this agreement. The Secretary of DHHS may waive, to the extent authorized by section 1896(d) of the Social Security Act, the requirement or approve equivalent or alternative ways of meeting the requirement when it reflects he unique status of DoD and is necessary to carry out the demonstration of TRICARE Senior Prime. A description of the requirements waived under section 1896(d) appears at Attachment B.

The DoD and DHHS Secretaries certify that DoD has sufficient resources and expertise to provide, consistent with payments described in Paragraph 7 below, the full range of benefits required to be provided to beneficiaries under the project and sufficient information and

billing systems in place to ensure the accurate and timely submission of claims for benefits and to ensure that providers of such services, physicians, and other health care professionals are reimbursed by the entity in a timely and accurate manner. Certification of individual sites will be subject to HCFA's approval process.

7. MEDICARE REIMBURSEMENT TO DOD

Medicare reimbursement and end-of-year reconciliation is based on the following provisions as defined further in Attachment C -- "Reimbursement"

a. Prior to being eligible for Medicare reimbursement under this demonstration in a given year, DoD will commit to the expenditure of resources for dual-eligible beneficiaries at a level that represents the DoD's FY96 level of effort at all demonstration sites.
b. Skilled nursing facility and home health costs, not a DoD benefit, paid by DoD for enrollees below the level of effort will be counted toward the level of effort.
c. For each demonstration year and each demonstration site, DoD and HCFA will establish a threshold for triggering interim payments during the demonstration year, expressed as a total annual dollar amount. That annual threshold will be 30 percent of the site's level of effort during the first demonstration year (pro-rated for the actual number of months of care delivery at each site), 40 percent during the second year, and 50 percent in the third. The total annual amount will be used to establish monthly dollar thresholds for triggering interim reimbursement. The monthly threshold at each site will be one-twelfth the annual threshold amount. For each demonstration month, HCFA will determine what it would pay each site for all enrollees, using the modified per capita reimbursement rates established by law. If HCFA's calculated amount exceeds the monthly reimbursement threshold for a site, then HCFA will reimburse DoD for the amount over the threshold. If the amount that HCFA should pay the site is less than the monthly reimbursement threshold, then DoD will not receive any reimbursement for that site for that month. The reimbursement rate by Medicare to DoD is 95 percent of the applicable Medicare+Choice rate as determined under the Balanced Budget Act of 1997 (P.L. 105-33) . In accordance with the authorizing legislation, the Medicare+Choice rate for each county will be adjusted to remove payments for graduate medical education (GME), indirect medical education (IME) and disproportionate share hospital (DSH). In accordance with the agreement by both Secretaries, 67 percent of capital payments will be removed. If requested by DoD and authorized by law, the Secretaries will reevaluate these latter adjustments based upon the recommendations of a demonstration evaluator or another public or private organization mutually acceptable to DHHS and DoD. Over the three years of the demonstration, the evaluation will track the rate and evaluate it against the primary goal of the demonstration.
d. As required by the Balanced Budget Act of 1997, the maximum total Medicare reimbursement to DoD from both Medicare and Medicare Partners for any demonstration year for all six demonstration sites will not exceed $50 million in the first year, $60 million in the second, and $65 million in the third. This is designed to avoid creating an artificial limitation on the demonstration and to limit he total risk to the Medicare Trust Fund. No more than 50 percent of the cap in each year shall be available for Medicare Partners. DoD will receive no payments after the maximum reimbursement amount has been reached in each demonstration year. For 1998, the $50 million ceiling shall be prorated based on the estimated enrollment at each site and the number of months that each site is operational during 1998. The ceiling for 1998 will be determined when the last site to begin in 1998 becomes operational.
e. At the end of each demonstration year, DHHS and DoD will conduct a reconciliation process. The purpose of the reconciliation is to determine whether DoD is entitled to retain reimbursements that they received under this demonstration and to determine the amount that they should retain. The reconciliation will not adjust for "underpayments" or "overpayments" that result from inefficiency or efficiency. The

reconciliation process is described in detail in Attachment C: Reimbursement.

- If DoD and DHHS agree that favorable or adverse selection into the DoD plan is occurring, HCFA will recalculate what Medicare's payments should have been and adjust total payments accordingly, consistent with applicable law.
- If DoD received capitation payments from Medicare and its actual costs were less than the FY96 level of effort, DoD reimburses Medicare for all funds received under the demonstration project (TRICARE Senior Prime and Medicare Partners). For the purpose of this test, expenses for all six sites are combined and compared with a combined six-site level of effort. The contributions from individual sites toward total expenses include expenses for space available care and expenses for enrolled care. Expenses for space-available care for the demonstration-wide test will be capped at a limit that varies with demonstration year. The limit will be 70 percent of the combined six-site level of effort for the first demonstration year, 60 percent the second year, and 50 percent the third. The limit during the first year will be prorated for the months of care delivery at the various sites as described in Appendix C.
- To retain reimbursements received under the demonstration project, expenses for enrolled care, summed across all six demonstration sites, must meet or exceed a minimum threshold that varies with the demonstration year. The threshold is 30 percent of the combined six-site level of effort for the first demonstration year, 40 percent for the second year, and 50 percent for the third.
- HCFA auditors and the DHHS IG will have access to DoD's facilities and data. HCFA and DoD will develop a process for settling any disputes that arise over the data.
- DoD will submit encounter data to HCFA for all Medicare-covered services provided to TRICARE Senior Prime beneficiaries under the demonstration.

8. LEVEL OF EFFORT

a. For the purposes of this demonstration, DoD's level of effort at each site is the actual level of effort expended by DoD on dual-eligible beneficiaries for FY96. During the first demonstration year, this will be pro-rated at each demonstration site for the number of months of care delivery. That level of effort will remain constant for the three years of the demonstration except in the following instances: 1) If for the demonstration years, overall defense health spending (Category 3 of the Defense Health Program (See definition in "Level of Effort" attachment; currently about $12 billion)), updated with an annual adjustment by the applicable composite inflation rates, changes by more than $100 million, then DoD may adjust the level of effort at each site by a proportionate amount (e.g., if the budget is $400 million lower or higher, and defense health spending (Category 3) amounts to $12 billion, the level of effort will fall or rise by approximately 3.3 percent). 2) If there are any base realignment and closure (BRAC) actions that result in reductions in DoD's ability to serve dual-eligibles, an adjustment will be made in the level of effort so as to hold DoD harmless.

b. The FY96 level of effort for each site consists of expenses incurred against the Defense Health Program for services covered under the demonstration for dual-eligible beneficiaries who are eligible to enroll in the demonstration (as specified in "Sites Selected and Population Covered"). During each demonstration year, level of effort consists of the same expenditure categories plus care provided to enrollees (i.e., enrollees below level of effort) under the demonstration.

c. The methodology for computing the FY96 level of effort for each site is described in Attachment D -- "Level of Effort."

d. The FY96 level of effort for each site will:
   - Exclude outpatient pharmacy expenses and Uniformed Services Treatment Facilities costs.
   - Treat DoD collections from Medicare supplemental policies the same in both

the baseline and the operational level of effort. Both agencies agree to reexamine this issue if there is a substantial change in collections during the demonstration.

- Take a "Population View" (versus a "Facility View"),based on the population eligible to enroll in the demonstration as specified under "Population Covered."
- Either include relevant "F" account costs from DoD's Medical Expense and Performance Reporting System (MEPRS) or directly adjust for the Institute for Defense Analysis (IDA)"add-on" factor, as specified in Attachment D. Over an eighteen month period, DoD will validate IDA's findings regarding MEPRS cost factors and the size of the add-on factors.

e. For purposes of reconciliation, the test of whether DoD achieved its level of effort is conducted at a demonstration-wide level. The DoD's level of effort will be the sum of the six individual levels of effort.

9. PROHIBITION AGAINST INCREASING MEDICARE COST

The demonstration project shall not increase the total cost of the Medicare program over what the cost would have been in the absence of the demonstration. If the DoD or DHHS Secretaries find that the expenditures under the Medicare program increased (or are expected to increase) during a fiscal year because of the demonstration project, the Secretaries shall take such steps as may be needed to recoup for the Medicare program the amount of such increase in expenditures and to prevent any such increase in the future. Such steps shall include payment of the amount of such increased expenditures by he Secretary of Defense from the current medical care appropriation of the Department of Defense to the trust funds, the suspension or termination of the demonstration project (in whole or in part), or lowering the amount of payment to DoD.

10. JOINT ANALYSIS OF COST, UTILIZATION AND OTHER DATA

DHHS and DoD agree to carry out analyses of a merged data set of dual -eligibles based on questions (including utilization and cost prior to and during the demonstration) developed jointly by the two agencies. DHHS and DoD agree that the DHHS Secretary shall have access to all data the DHHS Secretary determines is necessary to conduct independent estimates and audits of the maintenance of effort requirement, the annual reconciliation, and related matters required under the demonstration project.

11. EVALUATION

a. In addition to the General Accounting Office review referenced in Item 12 below, the demonstration shall be evaluated by an independent evaluator chosen jointly by DHHS and DoD, funded y DoD and in place as soon as possible following the start of the demonstration.

b. The evaluation contractor will produce an annual report, an interim report within 18 months of the initiation of this demonstration, and a final report not later than twelve months from he end of the demonstration. The evaluation will be based on the evaluation questions jointly developed by DHHS and DoD as illustrated in Attachment E -- "Evaluation". Of those questions, the primary evaluation question will be "Can DoD and Medicare implement a cost effective alternative for delivering accessible and quality care to dual-eligible beneficiaries?" The evaluation will also emphasize the four major areas identified by DHHS and DoD in delineating the evaluation questions. The evaluation will also examine the impact f the demonstration on medical services for active duty and active duty dependents.

c. DHHS and DoD will provide the necessary data to support the evaluation.

12. GENERAL ACCOUNTING OFFICE STUDY

Section 1896(k) of the Social Security Act directs the General Accounting Office (GAO) to

conduct a review and report to Congress as to whether or not the demonstration has increased the total cost of the Military Health System r the total cost of Medicare. Both agencies agree to jointly assist GAO with that review and report.

13. START DATE AND DURATION

The demonstration is authorized for three years and will end on December 31, 2000. Both Departments anticipate that the demonstration sites will become operational according to a phased schedule, to be published separately.

14. ADDITIONAL PROVISIONS

a. Military Treatment Facilities - No new military treatment facilities will be built and no existing facilities will be expanded with funds from the demonstration project.
b. Report - At least 60 days prior to the commencement of the demonstration project, the DoD and DHHS Secretaries shall submit a copy of this agreement to the Congressional committees of jurisdiction over the two departments.
c. Crediting of Payments - A payment received by the Secretary of Defense under the demonstration project shall be credited to the applicable DoD medical appropriation (and within that appropriation). Any such payment received during a fiscal year for services provided during a prior fiscal year may be obligated by the Secretary of Defense during the fiscal year in which the payment is received.
d. Inspector General - Nothing in this agreement shall limit the Inspector General of the Department of Health and Human Services from investigating any matters regarding the expenditure of funds under this title for the demonstration project, including compliance with the provisions of section 1896 of the Social Security Act and all other relevant laws.
e. Modification of TRICARE Contracts - In carrying out the demonstration project, the Secretary of Defense is authorized to amend existing TRICARE contracts (including contracts with designated providers) in order to provide the Medicare health care services to he Medicare-eligible military retirees and dependents enrolled in the demonstration project consistent with Part C of title XVIII of the Social Security Act as amended by sec. 4001 of the Balanced Budget Act of 1997.
f. This MOA will be amended as necessary following the publication of regulations for Medicare+Choice plans.
g. All automated systems will comply with federal laws, guidances, and policies for information systems security. These include, but are not limited to, the Privacy Act of 1974, the Computer Security Act of 1987, IRM Circular #10, DHHS Automated Information Systems Security Program, the HCFA Information Systems Security Policy and Program Handbook, and other HCFA systems security policies. All information systems will have a security plan. This security plan will be developed during the systems development phase, in accordance with the mandates of the Office of Management and Budget's Circular A -130, revised.

B. MEDICARE PARTNERS

1. LEGAL AUTHORITY

This demonstration project is conducted under the authority of section 1896(h) of the Social Security Act, as added by section 4015 of the Balanced Budget Act of 1997 (P.L. 105-33).

2. POPULATION COVERED

a. All sites may conduct the Medicare Partners portion of the demonstration.
b. Eligibility for participation in Medicare Partners consists of people who (during the demonstration):
    - Are covered through Medicare's aged program by Medicare Part A and

Medicare Part B and are eligible for care from DoD as described in section 1074(b) or 1076(b) of title 10 United States Code (i.e., the demonstration excludes Medicare beneficiaries who are disabled or eligible for ESRD benefits),
- Are enrolled in a Medicare+Choice plan with which DoD has contracted,
- Are residents of the geographic areas covered by the demonstration and where enrollment in the demonstration is offered,
- Are dual-eligible beneficiaries, who, as dual eligibles, used a military treatment facility before January 1,1998, or became dual-eligible starting after December 31, 1997, and
- Agree to receive covered services through a Medicare+Choice plan and to use the MTF for covered services only as referred by a Medicare+Choice plan under contract with a demonstration site.

c. Participation of Medicare-eligible military retirees or dependents in Medicare Partners shall be voluntary.

3. SERVICES COVERED UNDER MEDICARE+CHOICE PLAN CONTRACTS WITH DOD

a. Medicare+Choice plans are authorized to contract with and reimburse DoD for inpatient and physician specialty care services provided to dual-eligible beneficiaries. To the extent feasible and subject to capacity constraints, DoD may contract with Medicare+Choice plans which meet applicable HCFA requirements. DoD and HCFA will review and approve all MTF agreements with Medicare+Choice plans. Services covered include those inpatient and physician specialty care services for which DoD has contracted with the Medicare+Choice plan.

b. Priority access for dual-eligibles to the MTF shall apply only to those services for which the participating Medicare+Choice plan has contracted with DoD and is subject to the availability of resources at the MTF. Priority access to the MTF for contracted services shall be the same for Medicare Partners enrollees as for CHAMPUS-eligible retirees enrolled in TRICARE Prime.

4. SERVICES PROVIDED

The provision of services for beneficiaries enrolled in a Medicare Partners plan is the responsibility of the participating plan in which the beneficiary has enrolled. MTFs in the demonstration sites will provide services to Medicare Partners enrollees according to the terms of the contracts reached between the participating Medicare+Choice plans and the MTFs.

5. ENROLLMENT

a. Dual-eligible beneficiaries may enroll in a Medicare+Choice plan which has a Medicare Partners agreement with DoD according to the procedures established by the plan in compliance with HCFA requirements.

b. DoD shall establish procedures to identify in its own data systems enrollees in a Medicare Partners plan.

c. Supplemental or modified marketing materials produced by a Medicare Partners plan in connection with services offered to dual -eligible enrollees shall be reviewed and approved by DoD and HCFA.

6. APPLICATION OF CONDITIONS OF PARTICIPATION APPLICABLE TO MEDICARE+CHOICE PLAN PROVIDERS

DoD will meet the applicable requirements, except as waived by HCFA, of a contract health care provider to a Medicare+Choice plan.

7. REIMBURSEMENT

Reimbursements under Medicare Partners contracts will be specific to each agreement and subject to approval by DoD and HCFA as specified in Section B, paragraph 3a. All reimbursements from Medicare Partners count toward the annual maximum reimbursement described in Section A, paragraph 7.d). No more than 50 percent of the cap in each year shall be available for Medicare Partners. The method for determining the amount of Medicare Partners reimbursement retained by DoD or returned to HCFA is described in Attachment C. To the extent feasible, the portion of DoD reimbursement from Medicare Partners attributable to graduate medical education, indirect medical education, disproportionate share, and capital, for which DoD has received appropriated funds and which has been included in HCFA's payment to the Medicare+Choice plan, will be identified and returned to HCFA as part of the annual reconciliation process.

8. LEVEL OF EFFORT

Any costs arising from services provided under Medicare Partners will not count toward the demonstration's total level of effort. In addition, DoD will not retain any reimbursement for Medicare Partners unless it exceeds the demonstration's total level of effort.

9. PROHIBITION AGAINST INCREASING MEDICARE COST

The demonstration project shall not increase the total cost of the Medicare program over what the cost would have been in the absence of the demonstration. If the DoD or DHHS Secretaries find that the expenditures under the Medicare program increased (or are expected to increase) during a fiscal year because of the demonstration project, the Secretaries shall take such steps as may be needed to recoup for the Medicare program the amount of such increase in expenditures and to prevent any such increase in the future. Such steps shall include payment of the amount of such increased expenditures by the Secretary of Defense from the current medical care appropriation of the Department of Defense to the trust funds, the suspension or termination of the demonstration project (in whole or in part), or lowering the amount of payment to DoD.

10. JOINT ANALYSIS OF COST, UTILIZATION, AND OTHER DATA

DHHS and DoD agree to carry out analyses of a merged data set of dual -eligibles based on questions (including utilization and cost prior to and during the demonstration) developed jointly by the two agencies. DHHS and DoD agree that the DHHS Secretary shall have access to all data the DHHS Secretary determines is necessary to conduct independent estimates and audits of the maintenance of effort requirement, the annual reconciliation, and related matters required under the demonstration project.

11. EVALUATION

a. In addition to the General Accounting Office review referenced in Item 12 below, the demonstration shall be evaluated by an independent evaluator chosen jointly by DHHS and DoD, funded by DoD and in place as soon as possible following the start of the demonstration.
b. The evaluation contractor will produce an annual report, an interim report within 18 months of the initiation of this demonstration, and a final report not later than twelve months from the end of the demonstration. The evaluation will be based on the evaluation questions jointly developed by DHHS and DoD as illustrated in Attachment E -- "Evaluation". Of those questions, the primary evaluation question will be "Can DoD and Medicare implement a cost effective alternative for delivering accessible and quality care to dual-eligible beneficiaries?" The evaluation will also emphasize the four major areas identified by DHHS and DoD in delineating the evaluation questions. The evaluation will also examine the impact of the

demonstration on medical services for active duty and active duty dependents.

c. DHHS and DoD will provide the necessary data to support the evaluation.

12. GENERAL ACCOUNTING OFFICE STUDY

Section 1896(k) of the Social Security Act directs the General Accounting Office (GAO) to conduct a review and report to Congress as to whether or not the demonstration has increased the total cost of the Military Health System or the total cost of Medicare. Both agencies agree to jointly assist GAO with that review and report.

13. START DATE AND DURATION

The demonstration is authorized for three years and will end on December 31, 2000. Both Departments anticipate that Medicare Partners sites will become operational no earlier than 90 days after the start of health care delivery under TRICARE Senior Prime at that site, subject to the satisfactory progress of the TRICARE Senior Prime program as demonstrated through meeting the requirements of Attachment F- "Performance Measures" and evidence that adequate financial systems to track level of effort and reimbursement are in place.

14. ADDITIONAL PROVISIONS

a. Military Treatment Facilities - No new military treatment facilities will be built and no existing facilities will be expanded with funds from the demonstration project.

b. Report - At least 60 days prior to the commencement of the demonstration project, the DoD and DHHS Secretaries shall submit a copy of this agreement to the Congressional committees of jurisdiction over the two departments.

c. Crediting of Payments - A payment received by the Secretary of Defense under the demonstration project shall be credited to the applicable DoD medical appropriation (and within that appropriation). Any such payment received during a fiscal year for services provided during a prior fiscal year may be obligated by the Secretary of Defense during the fiscal year in which the payment is received.

d. Inspector General - Nothing in this agreement shall limit the Inspector General of the Department of Health and Human Services from investigating any matters regarding the expenditure of funds under this title for the demonstration project, including compliance with the provisions of section 1896 of the Social Security Act and all other relevant laws.

e. All automated systems will comply with federal laws, guidances, and policies for information systems security. These include, but are not limited to, the Privacy Act of 1974, the Computer Security Act of 1987, IRM Circular #10, DHHS Automated Information Systems Security Program, the HCFA Information Systems Security Policy and Program Handbook, and other HCFA systems security policies. All information systems will have a security plan. This security plan will be developed during the systems development phase, in accordance with the mandates of the Office of Management and Budget's Circular A-130, revised.

C. ATTACHMENTS

Included as part of this agreement are the following items:

Attachment A: Benefits under TRICARE Senior Prime
Attachment B: Applicable Conditions of Participation under TRICARE Senior Prime
Attachment C: Reimbursement
Attachment D: Level of Effort
Attachment E: Evaluation
Attachment F: Performance Measures

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ATTACHMENT C

REIMBURSEMENT

Overview

This attachment, and figures 1 through 19, describe the specific process for Medicare Program reimbursement to the Department of Defense (DoD) and for the end-of-year reconciliation.

Medicare Interim Payments to DoD

Under the demonstration, DoD may receive interim payments for the enrollment and treatment of its dual-eligible beneficiaries. During the execution of the demonstration project during any demonstration year, the department may receive a monthly per-member per-month capitated amount for TRICARE Senior Prime enrollees when the site's enrollment is above a specified threshold. These payments are interim, or provisional, payments. At the end of each demonstration year, a reconciliation will be conducted to determine whether DoD is entitled to keep any of its interim payments, and to determine if the amount of reimbursement was appropriate. This appendix describes the threshold mechanism that triggers the interim monthly payments. Then it describes the reconciliation process.

Thresholds for Reimbursement and Reconciliation

For each demonstration year and each demonstration site, DoD and HCFA will establish a threshold that will determine whether HCFA will reimburse DoD for enrollment at the site and determine the size of the reimbursement. The triggering threshold derives form each individual site's historical level of expenses for its dual eligible beneficiaries, termed the site's "level of effort". Calculation of the site's baseline level of effort is described in Appendix D.

The threshold for triggering interim payments from Medicare will be calculated from portion of each site's level of effort. The portion will be 30 percent of the site's level of effort for the first demonstration year, 40 percent in the second demonstration year, and 50 percent in the third. The 30 percent portion for the first demonstration ear will be scaled, or prorated, to the number of months of care delivery at each site. For example, if a site's level of effort was $90 million and delivered care for 5 months of the first demonstration year, the portion used to calculate a reimbursement threshold would be $11.25 million (5/12ths of 30 percent of $90 million).

The monthly threshold that triggers payments will be calculated by dividing the total dollar portion determined in the previous paragraph by the months of care delivery for he site. Continuing the example above, the monthly threshold will be $2.25 million $11.25 million divided by 5 months).

HCFA will calculate the amount that it would pay for all of DoD's enrollees under the demonstration program at a modified per capita Medicare+Choice reimbursement rate (described in the next section), and compare its calculated amount to the site's monthly threshold. If the calculated amount exceeds the monthly threshold, then HCFA will reimburse DoD for the difference as an interim payment. If the calculated amount is below the monthly threshold, HCFA will not make a payment to DoD for that month. Failure to enroll up to the threshold in a month will also result in an adjustment to interim payments from other months (described under Annual Reconciliation below). Payments for all demonstration sites combined are subject to a global cap for each demonstration year. The caps are $50 million for the first demonstration year, $60 million the second year, and $65 million the third. No more than 50 percent of the cap in each year shall be available for Medicare Partners.

Per Capita Reimbursement Rate

To calculate how much it would pay for TRICARE Senior Prime enrollees in the reimbursement

mechanism (described in the previous section), HCFA will use the following rate. The reimbursement rate by Medicare to DoD is 95 percent of the applicable Medicare+Choice rate as determined under the Balanced Budget Act of 1997 (P.L. 105-33) . In accordance with the authorizing legislation, the Medicare+Choice rate for each county will be adjusted to remove payments for graduate medical education (GME), indirect medical education (IME), and disproportionate share hospital (DSH). In accordance with the agreement by both Secretaries, 67 percent of capital will be removed.

Annual Reconciliation

At the end of each demonstration year, DHHS and DoD will conduct a formal reconciliation and evaluation to determine whether (1) all site's are entitled to retain the reimbursements they received from Medicare and (2) whether the amount of reimbursement were appropriate. The reconciliation consists of four steps:

1. Accumulate DoD's Expenses . The first step will be to determine the total amount of DoD expenditures across all six demonstration site for all dual-eligible beneficiaries residing in the service area. Two categories of expense will be accumulated: (1) expenses for care provided on a space-available basis to non enrolled dual eligible beneficiaries (termed "space-available level of effort"), and (2) expenses for care provided to erollees.

   Expenses for providing outpatient pharmacy services will not be included in any of the categories; nor will expenses incurred providing services under a Medicare Partners contract for services covered by the contract. Expenses incurred providing services not covered by a Medicare Partners agreement will be counted as space-available care.

   Expenses for space-available care are capped at a maximum of 70 percent of the combined level of effort across all six sites during the first demonstration year, 60 percent of the combined level of effort during the second, and 50 percent during the third. Because sites will be starting care delivery at varying time during the first demonstration year, the demonstration-wide cap on space-available expenses will be prorated during the first demonstration year as follows. Each individual site's level of effort will be prorated according to the number of months of care delivery during that first demonstration year. Then, the prorated level's of effort will be added across all six sites. Finally, 70 percent of the six site total will be used for the first year space-available cap.

2. **Determine Eligibility for Reimbursement.** The second step will be to determine whether the demonstration sites are eligible to retain any reimbursements from Medicare. There are two tests; both must be passed. The first compares total expenditures for all six sites, both for enrolled and for space available care, to DoD's combined level of effort for all sites. For any site to be eligible to retain reimbursements from HCFA, DoD must reach its combined level of effort.

   The second test compares DoD's expenditures for enrolled care across all demonstration sites against a minimum threshold that varies by demonstration year. The threshold is 30 percent of the combined six-site level of effort during the first demonstration year, 40 percent during the second, and 50 percent during the third. Again, the first year threshold on expenses for enrolled care will be prorated by the number of months of care delivery during that year in the manner similar to the way the threshold for space-available care is prorated (described in 1. above).

3. **Determine Amount of Reimbursement.** If DoD has met its level of effort for all demonstration sites, reimbursements from HCFA are subject to two adjustments. First, gross monthly payments from HCFA to a site will be summed over all months of a demonstration year (months of care delivery for the first demonstration year). The difference between this sum and the level of effort target will be the annual reimbursement that DoD is entitled to keep at each site. If the difference is negative, DoD will return all payments received to HCFA. This adjustment is performed at each site.

   Second, total reimbursements from HCFA may be adjusted upwards or downwards during reconciliation if there is compelling evidence of adverse or favorable risk selection in DoD's

enrollment, when compared with the HCFA population upon which the Medicare+Choice rates are based. The determination will be made analytically during as part of the reconciliation process and will be based upon submitted claims for covered services.

Third, DoD is only entitled to retain reimbursement above the aggregate level of effort. The level of effort will be prorated during the first demonstration year on the basis of months of care delivery at the various sites.

4. **Provide Access to Data**. The final step will be to provide HCFA auditors and the DHHS IG with access to DoD's records and data for demonstration sites. HCFA and DoD will develop a mutually acceptable process for settling any disputes that arise over the data.

Maximum Ceiling on Total Annual Medicare Reimbursement

For the demonstration project, the maximum total Medicare reimbursement to DoD for all six demonstration sites in any demonstration year shall not exceed $50 million in calendar year 1998, $60 million in calendar 1999, and $65 million in calendar year 2000. The cap for the first demonstration year will be prorated as described below. All reimbursements received by DoD for dual-eligible enrollees from Medicare or from Medicare Partners will count towards the annual ceiling. Should Medicare reimbursement to DoD meet the statutory cap in any of the project's three years, DoD will remain obligated to continue to provide the full range of services under the TRICARE Senior Prime benefit to all project enrollees. DoD will be financially liable for all care provided under TRICARE Senior Prime once the annual reimbursement cap is reached. No more than 50 percent of the cap in each year shall be available for Medicare Partners.

For 1998, the $50 million ceiling shall be prorated based on the estimated enrollment at each site and the number of months that each site is operational during 1998. The ceiling for 1998 will be determined when the last site to begin in 1998 becomes operational."

At the end of each month, DoD will report to HCFA all revenue that it has received during that month from Medicare+Choice plans. HCFA will track payments for TRICARE Senior Prime enrollees. If the annual cap for that year was exceeded in a prior month, DoD will remit all such revenue for each succeeding month to HCFA.

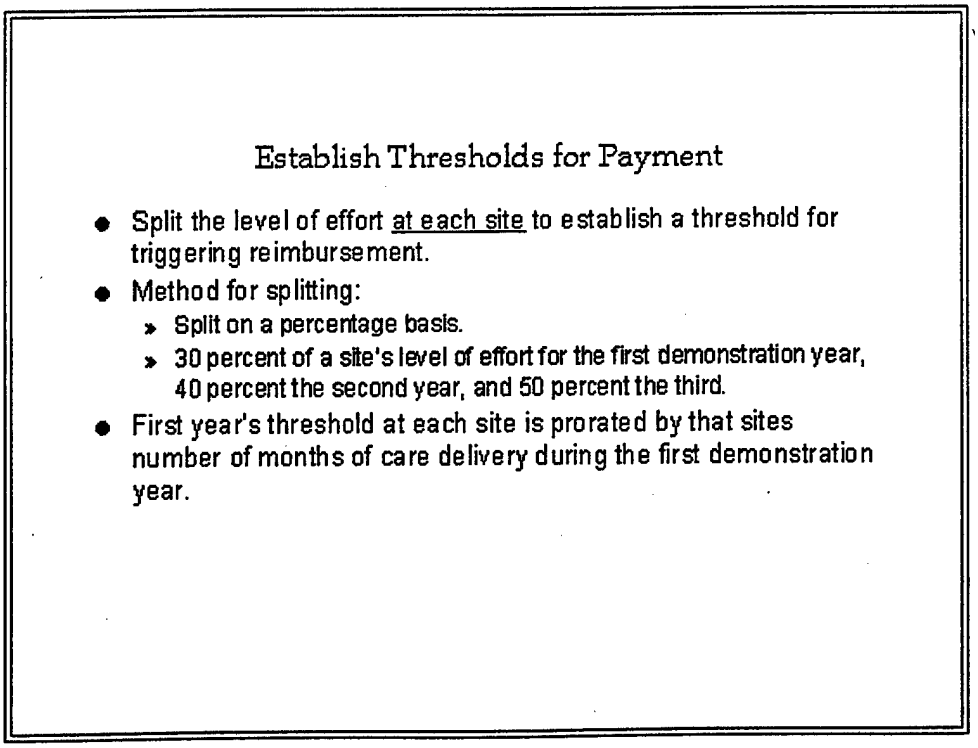


Figure 1

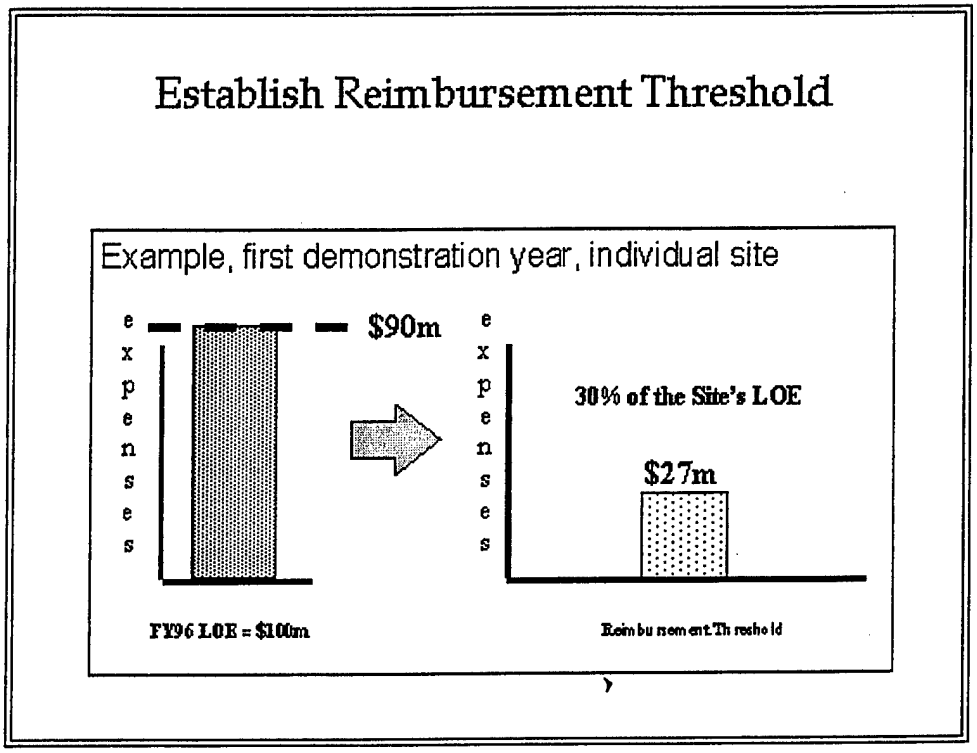


Figure 2

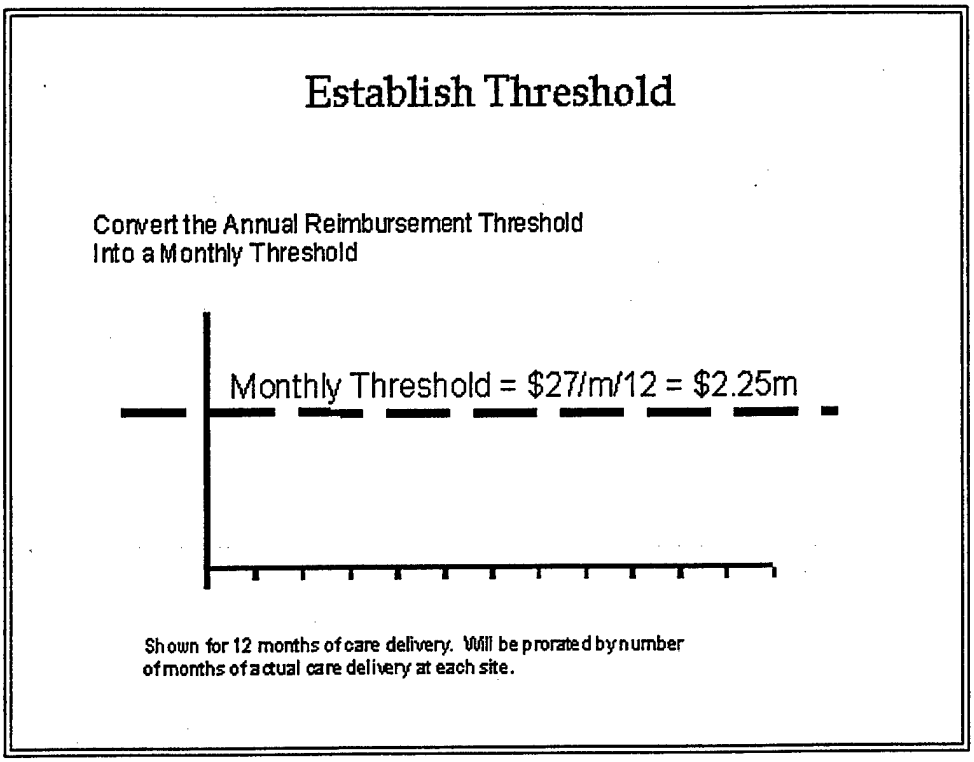
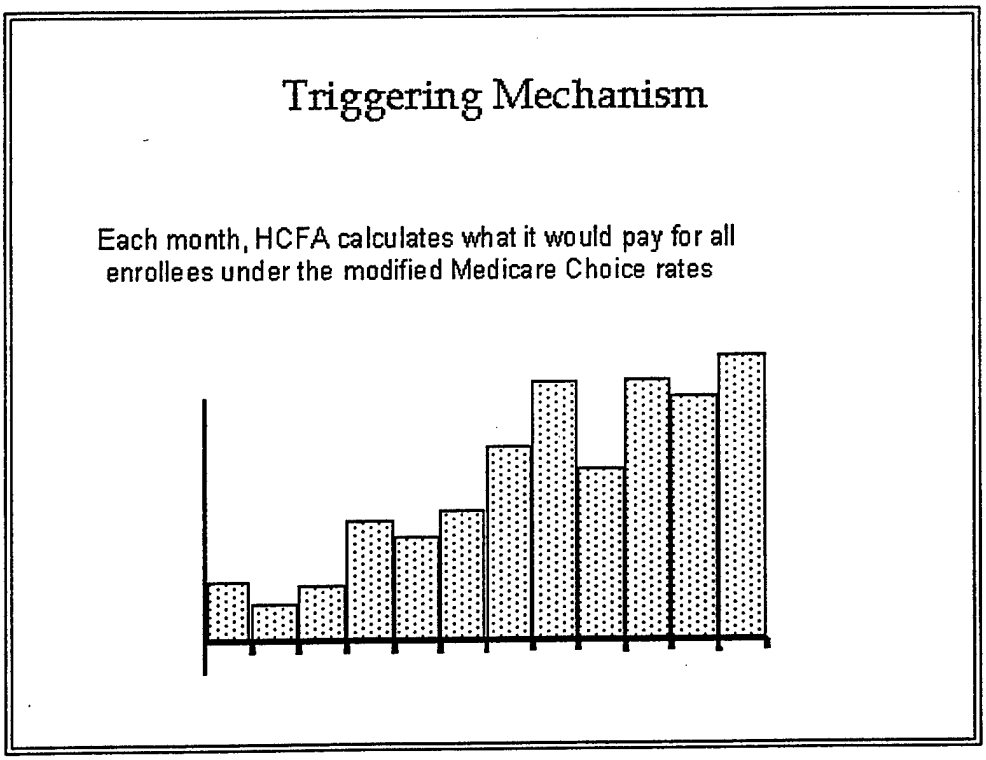


Figure 3



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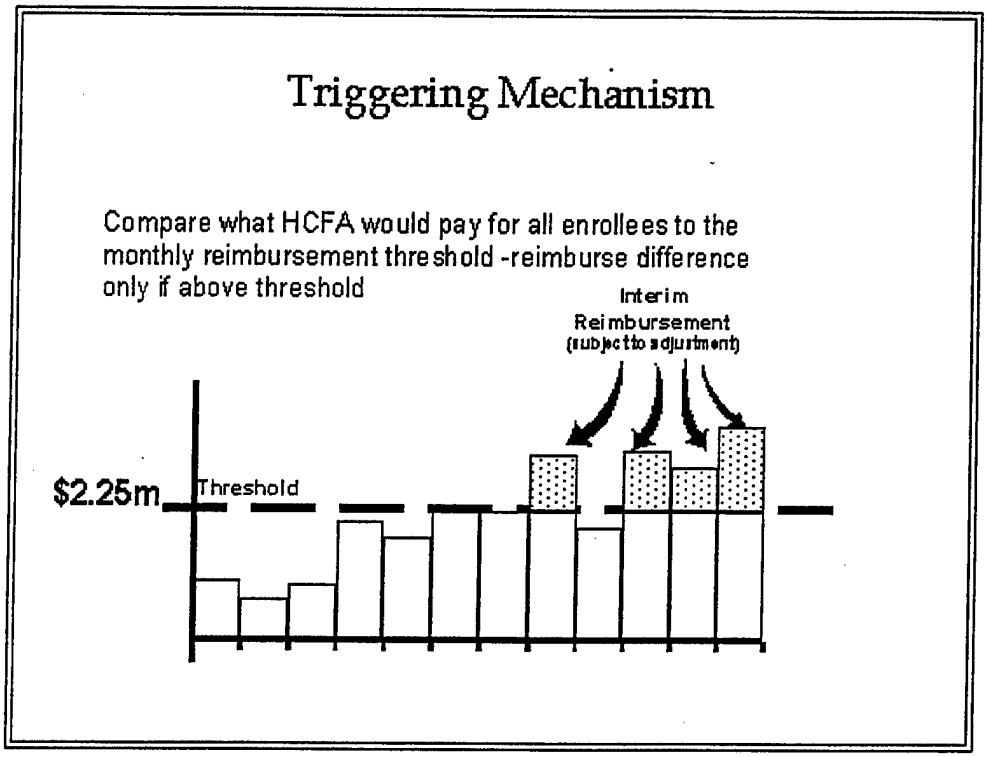

Triggering Mechanism
Compare what HCFA would pay for all enrollees to the monthly reimbursement threshold -reimburse difference only if above threshold
Interim Reimbursement (subject to adjustment)
$2.25m
Threshold

Figure 5

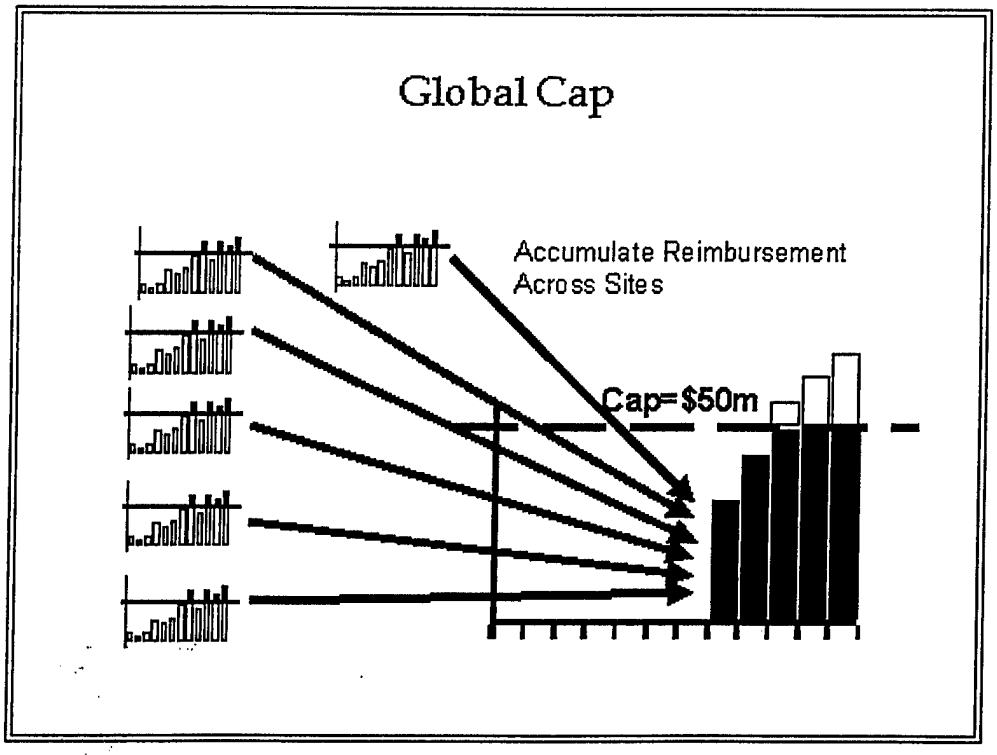

Global Cap
Accumulate Reimbursement Across Sites
Cap=$50m

Figure 6

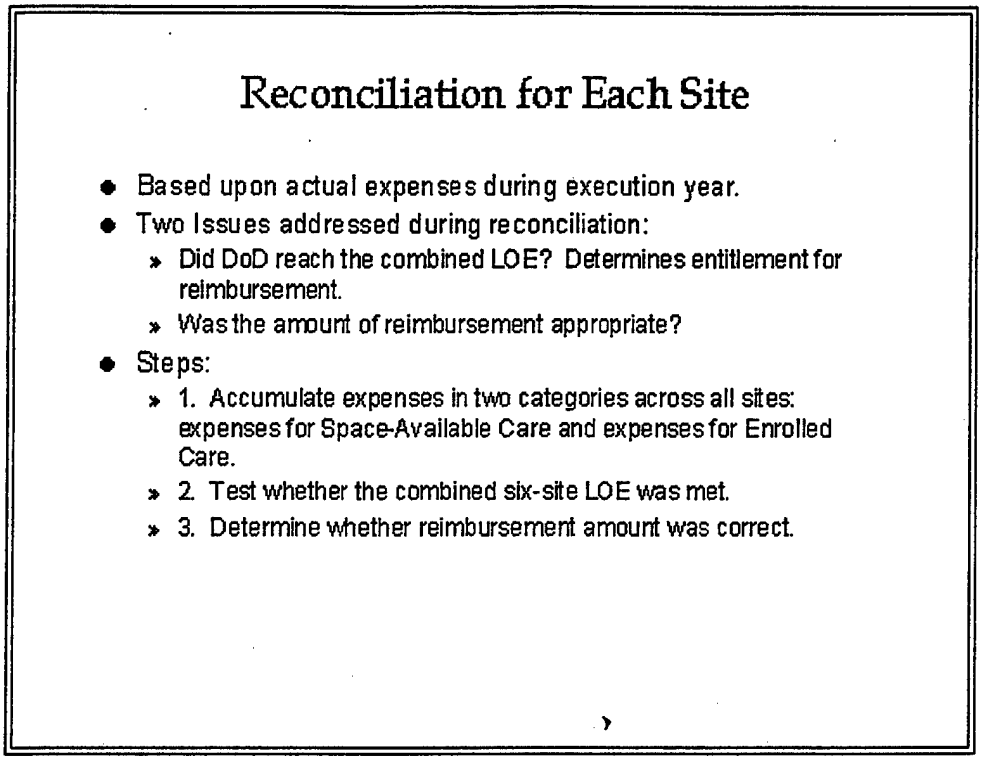


Figure 7

Tests for Meeting LOE

Two tests:

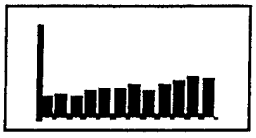
- Did the combined expenses for space-available care (capped) and expenses for enrolled care meet or exceed total LOE.
- Did expenses for enrolled care at all six sites exceed the minimum threshold for the demonstration (30%, 40%, or 50% of the combined six-site LOE in years 1, 2, and 3, with year 1 prorated).

Figure 8

Step 1: Accumulate Expenses.

During execution, a site begins to incur two types of expenses for its Medicare eligible beneficiaries.

expenses for enrollees



expenses for space-available care

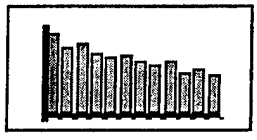


Figure 9

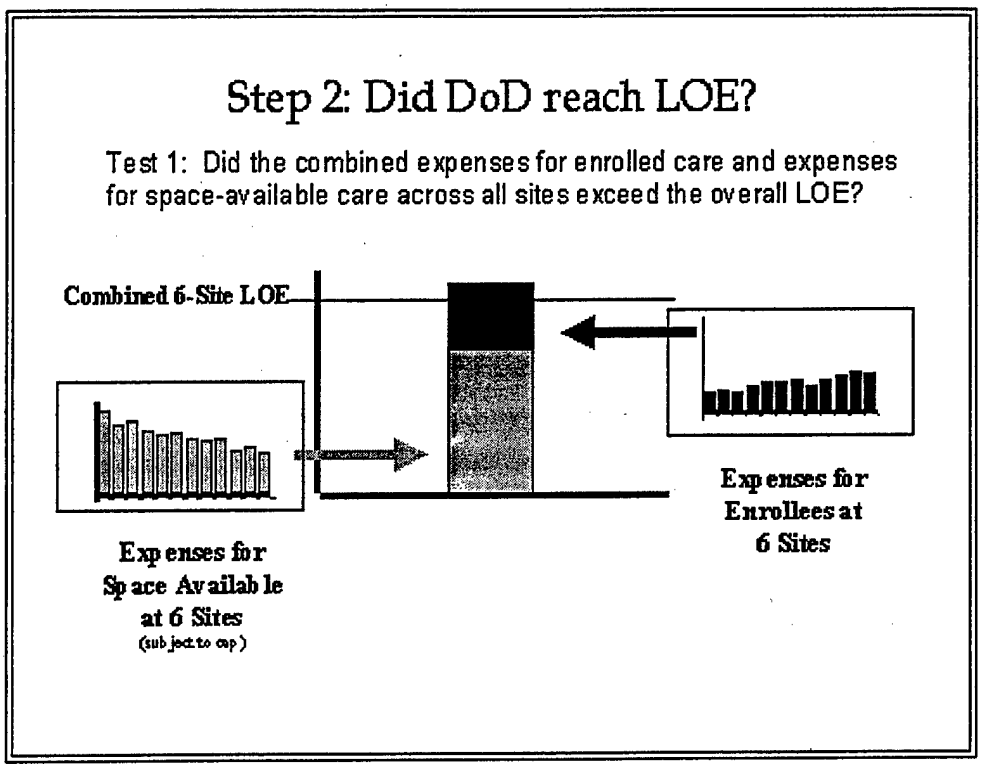

Step 2: Did DoD reach LOE?
Test 1: Did the combined expenses for enrolled care and expenses for space-available care across all sites exceed the overall LOE?
Combined 6-Site LOE
Expenses for Enrollees at 6 Sites
Expenses for Space Available at 6 Sites
(subject to cap)

Figure 10

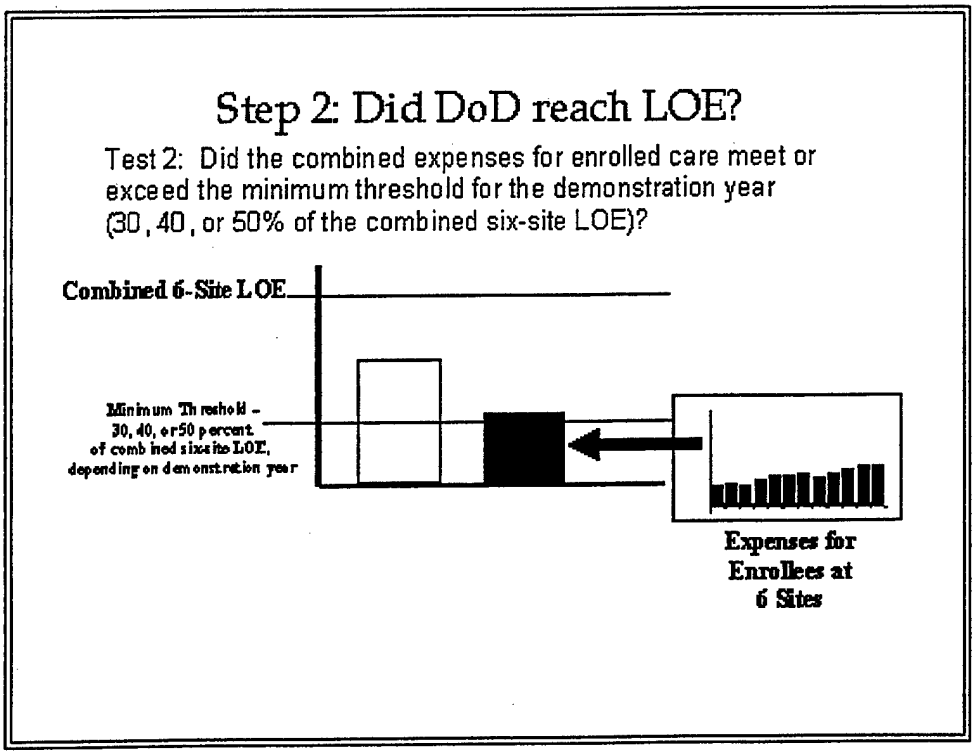

Step 2: Did DoD reach LOE?
Test 2: Did the combined expenses for enrolled care meet or exceed the minimum threshold for the demonstration year (30, 40, or 50% of the combined six-site LOE)?
Combined 6-Site LOE
Minimum Threshold – 30, 40, or 50 percent of combined six-site LOE, depending on demonstration year
Expenses for Enrollees at 6 Sites

Figure 11

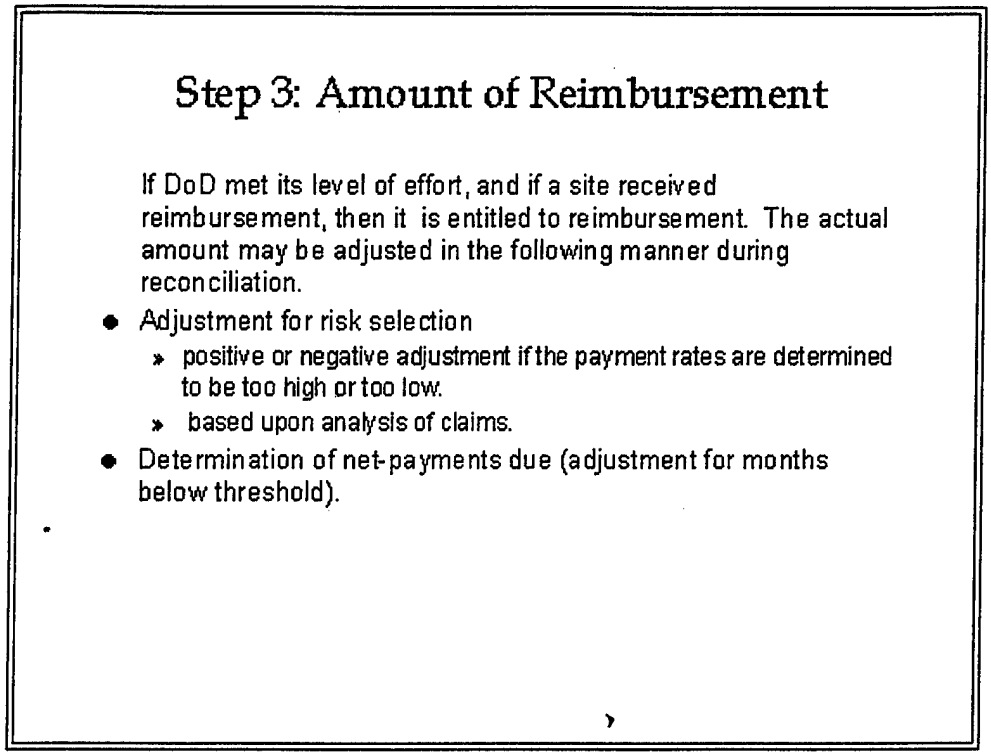


Figure 12

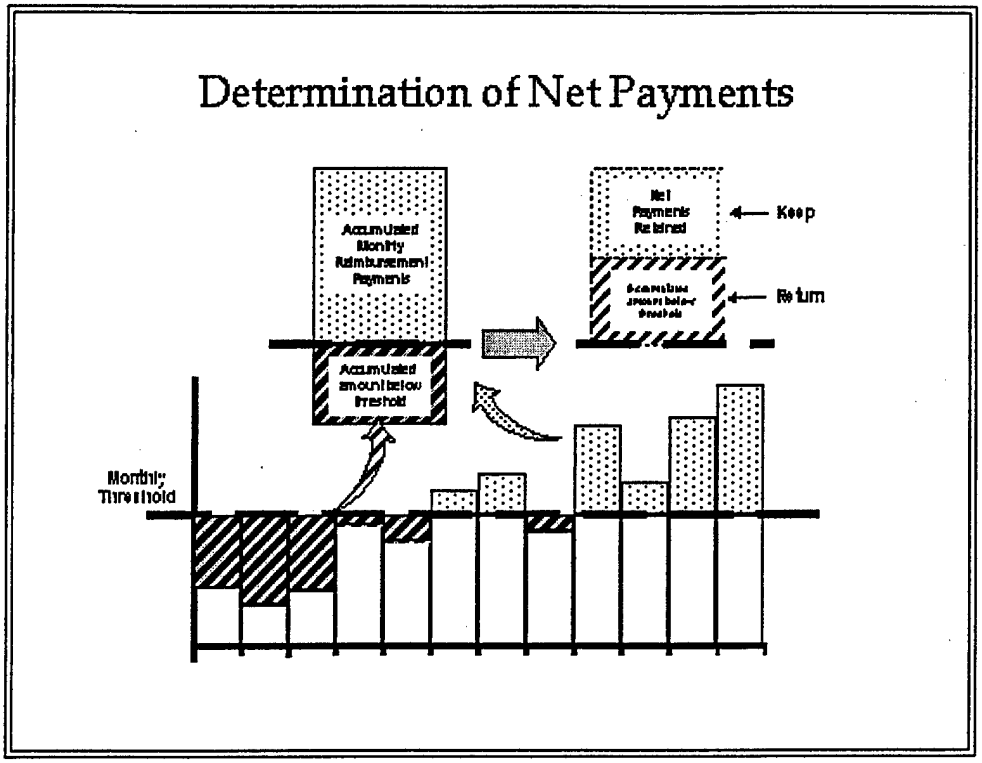


Figure 13

Medicare Partners

- Expenses for services covered by a Medicare Partners contract are not counted toward enrolled care or space-available care in meeting LOE.
- Expenses incurred by Medicare HMO enrollees for service not covered by a Medicare Partners contract are space-available care for meeting LOE.
- If DoD does not meet its LOE, all reimbursements from all Medicare Partners contracts will be returned to HCFA.

Figure 14

[Top]
Last update: 8/11/1998

ATTACHMENT D

LEVEL OF EFFORT

Introduction

Purpose

This attachment describes the methodology that the Department of Defense (DoD) will use to compute the FY96 "level of effort" (LOE) for each Medicare Demonstration site. General Principles for Establishing Medicare Level-of-Effort

DoD will compute the FY96 level-of-effort (historical expenditures for its Medicare eligible beneficiaries) separately for the service area of each Medicare Demonstration site. Service areas will be defined by lists of specific zip-codes for each site. Expenses will be accumulated from a population perspective; they will be the sum of all applicable DHP expenses for all dual eligible beneficiaries living in the zip-codes defining the site, regardless of where in the Military Health System those expenses were incurred.

The LOE will include most direct expenses for inpatient and outpatient care provided by military Medical Treatment Facilities (MTFs), with some additional burdening (explained in detail below) . It will also include the government's costs of care for Medicare eligibles referred to providers in networks operated by the Department's Managed Care Support Contractors. The FY96 LOE excludes any DoD expenses comparable to those removed from the Medicare+Choice rates as a result of the Balanced Budget Act of 1997 (e.g., expenses for Graduate Medical Education), or any types of care specifically excluded by agreement between DoD and HCFA (outpatient pharmacy costs). The FY96 LOE will also exclude DoD's monthly payments for dual-eligible enrollees of Uniform Services Treatment Facilities (USTFs) residing in the service area, unless they participate.

It is the agreement of the administering Secretaries that FY96 will be the baseline.

DETAILED METHODOLOGY

This section presents the separate methodologies used to estimate inpatient and ambulatory expenses.

Terminology

Medicare Demonstration Sites. In accordance with current legislation, six sites will be picked for the Medicare Demonstration. A service area for each site will be defined geographically by a specific list of zip-codes.

IDA Add-on. In an analysis performed for the "733 Study," the Institute for Defense Analysis (IDA) determined that certain expenses should be added to the clinical expenses reported in the Medical Expense and Performance Reporting System (MEPRS). Based upon their analyses, they estimated the amounts that should be added to inpatient and outpatient clinical expenses as a percentage add-on to the expenses routinely reported in the clinical accounts. Their recommended adjustments are presented in Table 1.

Patient-Level Cost Allocation. The methodology that DoD is evolving to estimate expenses at the level of the individual patient encounter. That methodology is described in a separate document to be provided by DoD.

Inpatient Care

Data Sources

Direct Care
Clinical Data: Standard Inpatient Data Record (SIDR) for each hospital discharge. Maintained in the Corporate Executive Information System (CEIS).

Expenses: Estimated from the Medical Expense and Performance Reporting System - Central (MEPRS), part of the Defense Medical Information System or from the MEPRS Executive Query System (MEQS), depending on military department.

MCSC Provider Network
Expenses: Government paid expense on Health Care Summary Records (HCSRs) provided

Methodology

Estimates of total inpatient expenses in each service area are determined by the following process:

1. Estimate inpatient expenses for care in Military Treatment Facilities (MTFs) for all Medicare eligibles in the service area.
    a. From the CEIS, isolate the electronic summary discharge records for all non-active duty DoD beneficiaries age 65 and older living in the service area.
    b. For each record isolated in step (1), estimate the cost of each discharge.
        1. Estimate the cost for each individual discharge using the Patient Level Costing Allocation (PLCA) methodology, as described in a separate document to be provided by DoD.
        2. Apply the IDA add-ons appropriate to the treating facility.
            a. Burden the cost of each record using IDA's percentages for DMSCC, Mgmt HQ, and Reference Labs, using the percentage developed for the Military Department of the hospital in which the care occurred (see Table 1). By agreement of the two administering Secretaries, burden the cost on each record with 1/3 of the IDA adjustment for Construction (see Table 1).
            b. Burden each record for Continuing Health Education (MEPRS Account FAL) and Patient Transportation/Movement (FEA/FEB/FEC) by allocating the actual expenditures in these accounts for treating facilities in the demonstration service area, and by the IDA percentage add-on (Table 1) for treating facilities outside the demonstration area. Since these accounts support all patient categories, as well as both inpatient and outpatient services, only a portion of their expenses will be allocated to the inpatient treatment of Medicare beneficiaries. The amount of each account allocated to Medicare inpatient expenses will be in the same proportion as MEPRS A Expenses (Inpatient Clinical Expenses) for the Medicare population are to the total of all MEPRS A and MEPRS B (Outpatient Clinical Expenses) in FY96. The amount allocated to Medicare inpatient expenses will be uniformly distributed across all Medicare inpatient records.
    c. For records from teaching facilities, deflate the amount using HCFA's adjustment for Indirect Medical Education (IME) based on that facility's count of beds and of interns and residents.

d. Sum the estimated costs for the service area.

2. Estimate inpatient expenses for care provided by the MCSC provider networks.

   a. Isolate all Health Care Summary Records for all non-active duty DoD beneficiaries, age 65 and older, living in the service area.

   b. Total the government paid portion for all claims.

Outpatient Care

Data Sources

Direct Care
Clinical Data: Monthly outpatient visits by patient age and third-level MEPRS from CHCS, as well as outpatient visits reported by third-level in MEPRS-Central or MEQS.

Expenses: Dollars by third-level MEPRS from MEPRS-Central or MEQS.

MCSC Provider Network
Expenses: Government paid expense on Health Care Summary Records (HCSRs) provided by the TRICARE Support Office (TSO) to the CEIS.

Methodology

The following steps will be used to estimate outpatient expenses in each region:

1. Estimate the outpatient expenses for Medicare eligibles at all MTFs in the service area using the following steps.

   a. Reconcile CHCS and MEPRS visit data.

      1. Annualize the CHCS data.

      2. Scale CHCS visit accounts to MEPRS or MEQs, if necessary.

   b. From the rescaled CHCS visit data, determine the proportion of visits in each workcenter (third-level MEPRS) that are for non-active duty beneficiaries age 65 and older.

   c. Apply the proportion of non-active duty beneficiaries age 65 and older to the MEPRS workcenter costs, excluding outpatient pharmacy expenses from the stepdown to ambulatory workcenters.

   d. Sum the costs for the beneficiaries under consideration across all MEPRS workcenters to get total outpatient visit expenses at the facility level.

   e. Apply the IDA add-ons for outpatient care.

      1. Inflate each record using IDA's percentages for DMSCC, Mgmt HQ, Reference Labs, and Clinical Investigation, using the percentage developed for the Military Department of the hospital in which the care occurred. By agreement of the two administering Secretaries, burden the cost on each record with 1/3 of the IDA adjustment for Construction (see Table 1).

      2. Burden the total expenses from d. by expenses in Continuing Health Education (MEPRS Account FAL) by allocating actual expenditures in the FAL account of the

treating facility. The amount of each account allocated to Medicare outpatient expenses in the same proportion as MEPRS B Expenses (Outpatient Clinical Expenses) for the Medicare population are to the total of all MEPRS A (Inpatient Clinical Expenses) and MEPRS B in FY96. The amount allocated to Medicare outpatient expenses will be uniformly distributed across all Medicare outpatient records.

f. Sum the estimates for all MTFs within the service area.

2. Estimate ambulatory expenses for care provided by the MCSC provider networks.

   a. Isolate all Health Care Summary Records for all non-active duty DoD beneficiaries, age 65 and older, living in the service area.

   b. Total the government paid portion for all claims.

Total Expense

Sum the total Inpatient and Outpatient expenses from each site to produce the Level of Effort.

Table 1. Institute for Defense Analysis (IDA) MEPRS Adjustments.

	ARMY %	NAVY %	AIR FORCE %	AVERAGE %
Construction	4.30	4.30	4.30	4.30
DMSSC	1.29	1.29	1.29	1.29
Mgmt, HQ	0.68	1.11	0.85	0.88
FAA-Reference Labs	0.39	0.39	0.39	0.39
FAH-Clinical Investigation[2]	0.71	0.22	0.71	0.55
FAK-Student Expense[1]	4.65	2.75	2.18	3.19
FAL-Continuing Health Ed[2]	1.17	1.14	0.90	1.07
Outpatient Total	13.2	11.2	10.6	11.7
FEA-Patient Transportation[2]	3.74	2.14	2.18	2.69
Inpatient Total	16.9	13.3	12.8	14.3

1. year of training; 100% for interns and residents before year 2. Excluded from the Medicare Demonstration Project as GME expenses.

2. Includes MEPRS accounts FEB and FEC. For treating facilities within demonstration areas, actual expenditures in these MEPRS accounts are allocated between Inpatient and Outpatient care and between Medicare and all other beneficiaries. For treating facilities outside of demonstration areas, the IDA percentages will be used.

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Last update: 8/11/1998

1999 Medicare+Choice Monthly Capitation Rates for Counties in Washington

State County Code	County Name	Aged Rates		Disabled Rates		ESRD Rates	
		Part A	Part B	Part A	Part B	Part A	Part B
50000	ADAMS	$233.27	$173.34	$214.57	$159.77	$1,220.42	$2,357.48
50010	ASOTIN	$217.91	$161.93	$214.57	$159.77	$1,220.42	$2,357.48
50020	BENTON	$234.90	$174.54	$214.57	$159.77	$1,220.42	$2,357.48
50030	CHELAN	$217.91	$161.93	$214.57	$159.77	$1,220.42	$2,357.48
50040	CLALLAM	$222.25	$165.15	$214.57	$159.77	$1,220.42	$2,357.48
50050	CLARK	$219.37	$163.00	$214.57	$159.77	$1,220.42	$2,357.48
50060	COLUMBIA	$221.53	$164.62	$214.57	$159.77	$1,220.42	$2,357.48
50070	COWLITZ	$224.59	$166.89	$214.57	$159.77	$1,220.42	$2,357.48
50080	DOUGLAS	$217.91	$161.93	$214.57	$159.77	$1,220.42	$2,357.48
50090	FERRY	$245.15	$182.16	$214.57	$159.77	$1,220.42	$2,357.48
50100	FRANKLIN	$251.49	$186.87	$214.57	$159.77	$1,220.42	$2,357.48
50110	GARFIELD	$217.91	$161.93	$214.57	$159.77	$1,220.42	$2,357.48
50120	GRANT	$217.91	$161.93	$214.57	$159.77	$1,220.42	$2,357.48
50130	GRAYS HARBOR	$242.54	$180.22	$214.57	$159.77	$1,220.42	$2,357.48
50140	ISLAND	$217.91	$161.93	$214.57	$159.77	$1,220.42	$2,357.48
50150	JEFFERSON	$232.13	$172.49	$214.57	$159.77	$1,220.42	$2,357.48
50160	KING	$255.62	$189.95	$247.19	$184.06	$1,220.42	$2,357.48
50170	KITSAP	$228.72	$169.96	$214.57	$159.77	$1,220.42	$2,357.48
50180	KITTITAS	$217.91	$161.93	$214.57	$159.77	$1,220.42	$2,357.48
50190	KLICKITAT	$217.91	$161.93	$214.57	$159.77	$1,220.42	$2,357.48
50200	LEWIS	$243.40	$180.86	$214.57	$159.77	$1,220.42	$2,357.48
50210	LINCOLN	$217.91	$161.93	$214.57	$159.77	$1,220.42	$2,357.48
50220	MASON	$257.49	$191.33	$214.57	$159.77	$1,220.42	$2,357.48
50230	OKANOGAN	$217.91	$161.93	$214.57	$159.77	$1,220.42	$2,357.48
50240	PACIFIC	$244.41	$181.61	$214.57	$159.77	$1,220.42	$2,357.48
50250	PEND OREILLE	$217.91	$161.93	$214.57	$159.77	$1,220.42	$2,357.48
50260	PIERCE	$237.37	$176.38	$214.57	$159.77	$1,220.42	$2,357.48
50270	SAN JUAN	$217.91	$161.93	$214.57	$159.77	$1,220.42	$2,357.48
50280	SKAGIT	$242.03	$179.84	$214.57	$159.77	$1,220.42	$2,357.48
50290	SKAMANIA	$217.91	$161.93	$214.57	$159.77	$1,220.42	$2,357.48
50300	SNOHOMISH	$240.34	$178.59	$216.75	$161.39	$1,220.42	$2,357.48
50310	SPOKANE	$244.63	$181.78	$214.57	$159.77	$1,220.42	$2,357.48
50320	STEVENS	$224.03	$166.47	$214.57	$159.77	$1,220.42	$2,357.48
50330	THURSTON	$230.24	$171.09	$214.57	$159.77	$1,220.42	$2,357.48
50340	WAHKIAKUM	$217.91	$161.93	$214.57	$159.77	$1,220.42	$2,357.48
50350	WALLA WALLA	$217.91	$161.93	$214.57	$159.77	$1,220.42	$2,357.48
50360	WHATCOM	$217.91	$161.93	$214.57	$159.77	$1,220.42	$2,357.48
50370	WHITMAN	$224.32	$166.68	$214.57	$159.77	$1,220.42	$2,357.48
50380	YAKIMA	$217.91	$161.93	$214.57	$159.77	$1,220.42	$2,357.48

Back to State Selection

Virginia

West Virginia

100% USPCC's as of March, 1999

Part A USPCC Rates

Calendar Year	Aged		Disabled		ESRD	
	Retrospective	Prospective	Retrospective	Prospective	Retrospective	Prospective
1985	$127.42	$129.66	$134.32	$138.46	$1,163.00	$751.14
1986	$128.65	$131.32	$134.05	$140.98	$1,239.72	$723.71
1987	$128.55	$132.92	$126.16	$140.11	$1,191.08	$795.27
1988	$136.28	$136.44	$124.37	$143.29	$1,319.73	$886.97
1989	$151.95	$152.28	$144.96	$160.74	$1,392.89	$884.01
1990*	$160.06	$171.35	$153.61	$159.33	$1,375.39	$930.85
1991	$175.92	$171.93	$164.76	$163.50	$1,356.24	$1,046.25
1992	$206.00	$186.29	$189.40	$170.19	$1,352.62	$1,220.91
1993	$209.72	$214.40	$189.77	$198.13	$1,223.39	$1,108.09
1994	$233.05	$236.69	$209.44	$219.17	$1,344.78	$1,327.28
1995	$255.46	$251.61	$224.27	$223.99	$1,399.72	$1,520.42
1996	$277.01	$274.84	$236.17	$235.40	$1,436.38	$1,461.86
1997	$292.23	$297.81	$231.10	$251.92	$1,426.64	$1,485.79
1998	$265.28	$271.26	$212.88	$224.86	$1,427.10	$1,051.64
1999	$274.27	$277.67	$220.86	$236.27	$1,432.03	$1,217.99
2000	-	$286.18	-	$230.48	-	$1,433.13

Part B USPCC Rates

Calendar Year	Aged		Disabled		ESRD	
	Retrospective	Prospective	Retrospective	Prospective	Retrospective	Prospective
1985	$61.39	$61.19	$63.55	$73.07	$1,345.96	$1,522.80
1986	$70.41	$66.01	$69.98	$77.52	$1,348.03	$1,531.72
1987	$80.32	$73.20	$76.44	$84.22	$1,394.25	$1,389.31
1988	$88.39	$97.65	$82.42	$86.96	$1,466.28	$1,107.55
1989	$96.62	$106.32	$87.60	$95.91	$1,536.66	$1,020.05
1990*	$105.48	$121.98	$93.54	$115.87	$1,641.46	$1,305.99
1991	$111.97	$125.40	$99.42	$105.42	$1,774.93	$1,346.15
1992	$116.68	$129.78	$106.21	$107.86	$1,820.67	$1,679.29
1993	$123.41	$144.24	$111.39	$115.71	$2,018.87	$1,803.83
1994	$134.20	$141.44	$121.13	$117.87	$2,072.65	$2,018.62
1995	$142.83	$148.91	$139.71	$131.82	$2,177.21	$2,153.81
1996	$148.97	$166.06	$144.64	$147.65	$2,221.34	$2,238.89
1997	$155.81	$169.14	$153.11	$149.06	$2,266.31	$2,375.41
1998	$191.78	$200.88	$178.39	$177.27	$2,307.43	$2,182.05
1999	$203.20	$206.31	$185.76	$175.90	$2,377.93	$2,353.11
2000	-	$218.78	-	$195.91	-	$2,436.13

* 1990 published rates included catastrophic coverage. This rate without catastrophic coverage would have been as follows:

Part	Aged: Retrospective	Disabled: Retrospective	ESRD: Retrospective
Part A	$158.67	$147.54	$930.85
Part B	$115.53	$110.00	$1,305.99

Return to: Medicare+Choice (AAPCC) Payment Rates Information

Last Updated March 1, 1999

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Sample Raw Data for MAMC
Source: MEPRS and CEIS

DMIS	0-64 Yrs of Age	MEPRS	Service	Case Wt.	Number	OBD	RWP		65 + yrs. of Age	MEPRS	Service	Case Wt.	RWP	Number	OBD
109	MAMC	AAAA	INTERNAL MEDICINE	0.3034	1	1	0.3034		MAMC	AAAA	INTERNAL MEDICINE	0.3547	0.3547	1	20
109	MAMC	AAAA	INTERNAL MEDICINE	0.3508	1	1	0.3508		MAMC	AAAA	INTERNAL MEDICINE	0.3597	0.3597	1	2
109	MAMC	AAAA	INTERNAL MEDICINE	0.3816	1	0	0.3816		MAMC	AAAA	INTERNAL MEDICINE	0.4017	0.4017	1	1
109	MAMC	AAAA	INTERNAL MEDICINE	0.4017	3	3	1.2051		MAMC	AAAA	INTERNAL MEDICINE	0.4233	0.8466	2	3
109	MAMC	AAAA	INTERNAL MEDICINE	0.4041	3	3	1.2123		MAMC	AAAA	INTERNAL MEDICINE	0.4345	0.4345	1	3
109	MAMC	AAAA	INTERNAL MEDICINE	0.4233	11	14	4.6563		MAMC	AAAA	INTERNAL MEDICINE	0.4637	0.4637	1	1
109	MAMC	AAAA	INTERNAL MEDICINE	0.4312	1	1	0.4312		MAMC	AAAA	INTERNAL MEDICINE	0.4639	0.4639	1	3
109	MAMC	AAAA	INTERNAL MEDICINE	0.4345	4	6	1.738		MAMC	AAAA	INTERNAL MEDICINE	0.464	6.032	13	39
109	MAMC	AAAA	INTERNAL MEDICINE	0.4404	1	3	0.4404		MAMC	AAAA	INTERNAL MEDICINE	0.4645	2.787	6	13
109	MAMC	AAAA	INTERNAL MEDICINE	0.4473	1	4	0.4473		MAMC	AAAA	INTERNAL MEDICINE	0.4679	4.2111	9	19
109	MAMC	AAAA	INTERNAL MEDICINE	0.4501	2	9	0.9002		MAMC	AAAA	INTERNAL MEDICINE	0.4889	0.9778	2	4
109	MAMC	AAAA	INTERNAL MEDICINE	0.4516	1	1	0.4516		MAMC	AAAA	INTERNAL MEDICINE	0.4955	0.991	2	7
109	MAMC	AAAA	INTERNAL MEDICINE	0.4551	1	2	0.4551		MAMC	AAAA	INTERNAL MEDICINE	0.4982	0.4982	1	8
109	MAMC	AAAA	INTERNAL MEDICINE	0.4637	3	7	1.3911		MAMC	AAAA	INTERNAL MEDICINE	0.4996	12.49	25	46
109	MAMC	AAAA	INTERNAL MEDICINE	0.464	10	18	4.64		MAMC	AAAA	INTERNAL MEDICINE	0.5172	4.6548	9	23
109	MAMC	AAAA	INTERNAL MEDICINE	0.4645	2	6	0.929		MAMC	AAAA	INTERNAL MEDICINE	0.519	0.519	1	3
109	MAMC	AAAA	INTERNAL MEDICINE	0.4679	15	29	7.0185		MAMC	AAAA	INTERNAL MEDICINE	0.5392	0.5392	1	3
109	MAMC	AAAA	INTERNAL MEDICINE	0.4718	2	3	0.9436		MAMC	AAAA	INTERNAL MEDICINE	0.5398	0.5398	1	2
109	MAMC	AAAA	INTERNAL MEDICINE	0.4889	11	29	5.3779		MAMC	AAAA	INTERNAL MEDICINE	0.5571	0.5571	1	1
109	MAMC	AAAA	INTERNAL MEDICINE	0.4926	1	1	0.4926		MAMC	AAAA	INTERNAL MEDICINE	0.5593	0.5593	1	4
109	MAMC	AAAA	INTERNAL MEDICINE	0.4955	7	12	3.4685		MAMC	AAAA	INTERNAL MEDICINE	0.5596	6.1556	11	26
109	MAMC	AAAA	INTERNAL MEDICINE	0.4958	1	1	0.4958		MAMC	AAAA	INTERNAL MEDICINE	0.565	2.26	4	15
109	MAMC	AAAA	INTERNAL MEDICINE	0.4982	2	6	0.9964		MAMC	AAAA	INTERNAL MEDICINE	0.5697	1.7091	3	5
109	MAMC	AAAA	INTERNAL MEDICINE	0.4996	76	92	37.9696		MAMC	AAAA	INTERNAL MEDICINE	0.5784	1.1568	2	5
109	MAMC	AAAA	INTERNAL MEDICINE	0.5172	10	20	5.172		MAMC	AAAA	INTERNAL MEDICINE	0.5812	5.2308	9	39
109	MAMC	AAAA	INTERNAL MEDICINE	0.5226	4	21	2.0904		MAMC	AAAA	INTERNAL MEDICINE	0.5871	3.5226	6	21
109	MAMC	AAAA	INTERNAL MEDICINE	0.5392	1	2	0.5392		MAMC	AAAA	INTERNAL MEDICINE	0.5876	7.6388	13	44
109	MAMC	AAAA	INTERNAL MEDICINE	0.5398	1	4	0.5398		MAMC	AAAA	INTERNAL MEDICINE	0.5912	0.5912	1	4
109	MAMC	AAAA	INTERNAL MEDICINE	0.5423	1	2	0.5423		MAMC	AAAA	INTERNAL MEDICINE	0.595	1.785	3	6
109	MAMC	AAAA	INTERNAL MEDICINE	0.5501	1	4	0.5501		MAMC	AAAA	INTERNAL MEDICINE	0.5986	2.993	5	8
109	MAMC	AAAA	INTERNAL MEDICINE	0.5593	2	9	1.1186		MAMC	AAAA	INTERNAL MEDICINE	0.6064	1.8192	3	25
109	MAMC	AAAA	INTERNAL MEDICINE	0.5596	26	72	14.5496		MAMC	AAAA	INTERNAL MEDICINE	0.6111	0.6111	1	4
109	MAMC	AAAA	INTERNAL MEDICINE	0.565	6	27	3.39		MAMC	AAAA	INTERNAL MEDICINE	0.619	0.619	1	1
109	MAMC	AAAA	INTERNAL MEDICINE	0.5733	1	6	0.5733		MAMC	AAAA	INTERNAL MEDICINE	0.6291	0.6291	1	8
109	MAMC	AAAA	INTERNAL MEDICINE	0.5756	6	16	3.4536		MAMC	AAAA	INTERNAL MEDICINE	0.6379	0.6379	1	1
109	MAMC	AAAA	INTERNAL MEDICINE	0.5784	6	18	3.4704		MAMC	AAAA	INTERNAL MEDICINE	0.6529	1.9587	3	21
109	MAMC	AAAA	INTERNAL MEDICINE	0.5812	4	20	2.3248		MAMC	AAAA	INTERNAL MEDICINE	0.6624	0.6624	1	2
109	MAMC	AAAA	INTERNAL MEDICINE	0.5851	1	1	0.5851		MAMC	AAAA	INTERNAL MEDICINE	0.6666	3.333	5	11
109	MAMC	AAAA	INTERNAL MEDICINE	0.5871	50	154	29.355		MAMC	AAAA	INTERNAL MEDICINE	0.678	0.678	1	7
109	MAMC	AAAA	INTERNAL MEDICINE	0.5876	16	53	9.4016		MAMC	AAAA	INTERNAL MEDICINE	0.6809	8.8517	13	36
109	MAMC	AAAA	INTERNAL MEDICINE	0.5986	19	39	11.3734		MAMC	AAAA	INTERNAL MEDICINE	0.6905	11.048	16	68
109	MAMC	AAAA	INTERNAL MEDICINE	0.6064	1	2	0.6064		MAMC	AAAA	INTERNAL MEDICINE	0.6937	14.5677	21	100
109	MAMC	AAAA	INTERNAL MEDICINE	0.6111	4	27	2.4444		MAMC	AAAA	INTERNAL MEDICINE	0.6982	0.6982	1	2
109	MAMC	AAAA	INTERNAL MEDICINE	0.626	1	1	0.626		MAMC	AAAA	INTERNAL MEDICINE	0.7049	0.7049	1	10
109	MAMC	AAAA	INTERNAL MEDICINE	0.6281	4	13	2.5124		MAMC	AAAA	INTERNAL MEDICINE	0.7551	2.2653	3	11
109	MAMC	AAAA	INTERNAL MEDICINE	0.6291	1	5	0.6291		MAMC	AAAA	INTERNAL MEDICINE	0.7561	1.5122	2	8
109	MAMC	AAAA	INTERNAL MEDICINE	0.634	1	4	0.634		MAMC	AAAA	INTERNAL MEDICINE	0.7611	0.7611	1	14
109	MAMC	AAAA	INTERNAL MEDICINE	0.6379	2	14	1.2758		MAMC	AAAA	INTERNAL MEDICINE	0.7645	0.7645	1	4

Sample Summarized Raw Data for MAMC
Source: MEPRS and CEIS

MEPRS	Number	RWP	CW
Total AAA	666	728.7737	1.094254805
Total AAA 65+	722	942.8166	1.305840166
Grand Total	1388	1671.5903	1.204315778
Total AAB	420	467.0748	1.112082857
Total AAB 65+	336	528.8465	1.573947917
Grand Total	756	995.9213	1.317356217
Total AAE	89	9.7436	0.109478652
Total AAE 65+	7	3.5119	0.5017
Grand Total	96	13.2555	0.138078125
Total AAF	106	18.2686	0.172345283
Total AAF 65+	6	1.253	0.208833333
Grand Total	112	19.5216	0.1743
Total AAG	122	140.2036	1.149209836
Total AAG 65+	4	18.4728	4.6182
Grand Total	126	158.6764	1.259336508
Total AAI	10	0.992	0.0992
Total AAI 65+	5	0	0
Grand Total	15	0.992	0.066133333
Total AAJ	37	5.8443	0.157954054
Total AAJ 65+	19	0	0
Grand Total	56	5.8443	0.1043625
Total AAK	49	331.2824	6.760865306
Total AAK 65+	24	143.7404	5.989183333
Grand Total	73	475.0228	6.507161644

MEPRS	Number	RWP	CW
Total AAL	124	22.2283	0.179260484
Total AAL 65+	12	0	0
Grand Total	136	22.2283	0.163443382
Total AAM	12	0.6847	0.057058333
Total AAM 65+	3	0	0
Grand Total	15	0.6847	0.045646667
Total AAR	16	1.222	0.076375
Total AAR 65+	2	0	0
Grand Total	18	1.222	0.067888889
Total ABA	950	994.5953	1.046942421
Total ABA 65+	342	386.508	1.130140351
Grand Total	1292	1381.1033	1.068965402
Total ABB	262	350.6702	1.338435878
Total ABB 65+	172	281.8451	1.638634302
Grand Total	434	632.5153	1.457408525
Total ABD	242	370.4142	1.53063719
Total ABD 65+	24	77.079	3.211625
Grand Total	266	447.4932	1.682305263
Total ABE	56	26.7768	0.478157143
Total ABE 65+	7	5.0396	0.719942857
Grand Total	63	31.8164	0.505022222
Total ABF	91	1.9104	0.020993407
Total ABF 65+	5	0.4404	0.08808
Grand Total	96	2.3508	0.0244875

Calculation of Individual Cost:
General Surgery <65 Data for MAMC
Source: MEPRS and CEIS

MEPRS	Service	CMI	# Disp	RWP	Product Cost	Ind Cost
ABA	GENERAL SURGERY	0.3034	18	5.4612	$ 26,986.67	$ 1,499.26
ABA	GENERAL SURGERY	0.3129	9	2.8161	$ 13,915.84	$ 1,546.20
ABA	GENERAL SURGERY	0.3508	11	3.8588	$ 19,068.37	$ 1,733.49
ABA	GENERAL SURGERY	0.4103	13	5.3339	$ 26,357.61	$ 2,027.51
ABA	GENERAL SURGERY	0.4383	21	9.2043	$ 45,483.30	$ 2,165.87
ABA	GENERAL SURGERY	0.4501	5	2.2505	$ 11,120.91	$ 2,224.18
ABA	GENERAL SURGERY	0.4535	20	9.07	$ 44,819.65	$ 2,240.98
ABA	GENERAL SURGERY	0.4637	1	0.4637	$ 2,291.39	$ 2,291.39
ABA	GENERAL SURGERY	0.4679	14	6.5506	$ 32,369.97	$ 2,312.14
ABA	GENERAL SURGERY	0.4718	20	9.436	$ 46,628.25	$ 2,331.41
ABA	GENERAL SURGERY	0.4982	13	6.4766	$ 32,004.30	$ 2,461.87
ABA	GENERAL SURGERY	0.5172	22	11.3784	$ 56,226.67	$ 2,555.76
ABA	GENERAL SURGERY	0.5189	2	1.0378	$ 5,128.32	$ 2,564.16
ABA	GENERAL SURGERY	0.5392	18	9.7056	$ 47,960.49	$ 2,664.47
ABA	GENERAL SURGERY	0.5423	2	1.0846	$ 5,359.58	$ 2,679.79
ABA	GENERAL SURGERY	0.5596	34	19.0264	$ 94,019.48	$ 2,765.28
ABA	GENERAL SURGERY	0.565	8	4.52	$ 22,335.70	$ 2,791.96
ABA	GENERAL SURGERY	0.5668	25	14.17	$ 70,021.44	$ 2,800.86
ABA	GENERAL SURGERY	0.5733	4	2.2932	$ 11,331.91	$ 2,832.98
ABA	GENERAL SURGERY	0.5784	16	9.2544	$ 45,730.87	$ 2,858.18
ABA	GENERAL SURGERY	0.5792	1	0.5792	$ 2,862.13	$ 2,862.13
ABA	GENERAL SURGERY	0.5907	18	10.6326	$ 52,541.28	$ 2,918.96
ABA	GENERAL SURGERY	0.5912	11	6.5032	$ 32,135.74	$ 2,921.43
ABA	GENERAL SURGERY	0.6002	27	16.2054	$ 80,079.43	$ 2,965.90
ABA	GENERAL SURGERY	0.6281	2	1.2562	$ 6,207.55	$ 3,103.77
ABA	GENERAL SURGERY	0.6379	12	7.6548	$ 37,826.40	$ 3,152.20
ABA	GENERAL SURGERY	0.6399	5	3.1995	$ 15,810.42	$ 3,162.08
ABA	GENERAL SURGERY	0.6422	1	0.6422	$ 3,173.45	$ 3,173.45
ABA	GENERAL SURGERY	0.6532	12	7.8384	$ 38,733.67	$ 3,227.81
ABA	GENERAL SURGERY	0.6898	3	2.0694	$ 10,226.00	$ 3,408.67
ABA	GENERAL SURGERY	0.6937	6	4.1622	$ 20,567.63	$ 3,427.94
ABA	GENERAL SURGERY	0.6961	5	3.4805	$ 17,198.99	$ 3,439.80
ABA	GENERAL SURGERY	0.6982	2	1.3964	$ 6,900.35	$ 3,450.17
ABA	GENERAL SURGERY	0.7049	1	0.7049	$ 3,483.28	$ 3,483.28
ABA	GENERAL SURGERY	0.7151	8	5.7208	$ 28,269.49	$ 3,533.69
ABA	GENERAL SURGERY	0.7523	12	9.0276	$ 44,610.13	$ 3,717.51
ABA	GENERAL SURGERY	0.7561	2	1.5122	$ 7,472.58	$ 3,736.29
ABA	GENERAL SURGERY	0.7564	6	4.5384	$ 22,426.63	$ 3,737.77
ABA	GENERAL SURGERY	0.7688	2	1.5376	$ 7,598.09	$ 3,799.05
ABA	GENERAL SURGERY	0.7725	2	1.545	$ 7,634.66	$ 3,817.33
ABA	GENERAL SURGERY	0.7767	1	0.7767	$ 3,838.08	$ 3,838.08
ABA	GENERAL SURGERY	0.7772	17	13.2124	$ 65,289.44	$ 3,840.56
ABA	GENERAL SURGERY	0.7802	23	17.9446	$ 88,673.73	$ 3,855.38
ABA	GENERAL SURGERY	0.8178	11	8.9958	$ 44,452.99	$ 4,041.18
ABA	GENERAL SURGERY	0.8262	15	12.393	$ 61,240.35	$ 4,082.69
ABA	GENERAL SURGERY	0.833	9	7.497	$ 37,046.63	$ 4,116.29
ABA	GENERAL SURGERY	0.8354	1	0.8354	$ 4,128.15	$ 4,128.15
ABA	GENERAL SURGERY	0.8355	6	5.013	$ 24,771.88	$ 4,128.65
ABA	GENERAL SURGERY	0.8396	1	0.8396	$ 4,148.91	$ 4,148.91
ABA	GENERAL SURGERY	0.8578	27	23.1606	$ 114,448.74	$ 4,238.84
ABA	GENERAL SURGERY	0.8611	15	12.9165	$ 63,827.24	$ 4,255.15
ABA	GENERAL SURGERY	0.8868	4	3.5472	$ 17,528.59	$ 4,382.15
ABA	GENERAL SURGERY	0.8926	2	1.7852	$ 8,821.61	$ 4,410.81
ABA	GENERAL SURGERY	0.9032	1	0.9032	$ 4,463.19	$ 4,463.19
ABA	GENERAL SURGERY	0.9057	3	2.7171	$ 13,426.62	$ 4,475.54
ABA	GENERAL SURGERY	0.9092	14	12.7288	$ 62,899.71	$ 4,492.84
ABA	GENERAL SURGERY	0.9203	8	7.3624	$ 36,381.50	$ 4,547.69
ABA	GENERAL SURGERY	0.9353	5	4.6765	$ 23,109.05	$ 4,621.81
ABA	GENERAL SURGERY	0.9365	3	2.8095	$ 13,883.22	$ 4,627.74
ABA	GENERAL SURGERY	0.9527	2	1.9054	$ 9,415.59	$ 4,707.79
ABA	GENERAL SURGERY	0.9549	3	2.8647	$ 14,155.99	$ 4,718.66
ABA	GENERAL SURGERY	0.9613	1	0.9613	$ 4,750.29	$ 4,750.29
ABA	GENERAL SURGERY	0.9668	4	3.8672	$ 19,109.87	$ 4,777.47
ABA	GENERAL SURGERY	0.9694	7	6.7858	$ 33,532.22	$ 4,790.32
ABA	GENERAL SURGERY	0.9919	2	1.9838	$ 9,803.00	$ 4,901.50
ABA	GENERAL SURGERY	1.0196	7	7.1372	$ 35,268.67	$ 5,038.38
ABA	GENERAL SURGERY	1.0198	13	13.2574	$ 65,511.80	$ 5,039.37
ABA	GENERAL SURGERY	1.0272	3	3.0816	$ 15,227.81	$ 5,075.94
ABA	GENERAL SURGERY	1.0325	4	4.13	$ 20,408.51	$ 5,102.13
ABA	GENERAL SURGERY	1.0387	1	1.0387	$ 5,132.76	$ 5,132.76
ABA	GENERAL SURGERY	1.0463	4	4.1852	$ 20,681.28	$ 5,170.32
ABA	GENERAL SURGERY	1.0589	2	2.1178	$ 10,465.17	$ 5,232.58
ABA	GENERAL SURGERY	1.0709	6	6.4254	$ 31,751.29	$ 5,291.88
ABA	GENERAL SURGERY	1.0875	1	1.0875	$ 5,373.91	$ 5,373.91
ABA	GENERAL SURGERY	1.0968	2	2.1936	$ 10,839.73	$ 5,419.87
ABA	GENERAL SURGERY	1.0979	3	3.2937	$ 16,275.91	$ 5,425.30
ABA	GENERAL SURGERY	1.0995	1	1.0995	$ 5,433.21	$ 5,433.21

Calculation of Individual Cost:
General Surgery <65 Data for MAMC
Source: MEPRS and CEIS

ABA	GENERAL SURGERY	1.1073	36	39.8628	$ 196,983.12	$ 5,471.75
ABA	GENERAL SURGERY	1.1371	4	4.5484	$ 22,476.04	$ 5,619.01
ABA	GENERAL SURGERY	1.143	7	8.001	$ 39,537.16	$ 5,648.17
ABA	GENERAL SURGERY	1.1435	6	6.861	$ 33,903.82	$ 5,650.64
ABA	GENERAL SURGERY	1.2106	5	6.053	$ 29,911.06	$ 5,982.21
ABA	GENERAL SURGERY	1.2214	6	7.3284	$ 36,213.49	$ 6,035.58
ABA	GENERAL SURGERY	1.2235	2	2.447	$ 12,091.92	$ 6,045.96
ABA	GENERAL SURGERY	1.2301	1	1.2301	$ 6,078.57	$ 6,078.57
ABA	GENERAL SURGERY	1.2342	7	8.6394	$ 42,691.83	$ 6,098.83
ABA	GENERAL SURGERY	1.2772	8	10.2176	$ 50,490.55	$ 6,311.32
ABA	GENERAL SURGERY	1.3157	2	2.6314	$ 13,003.14	$ 6,501.57
ABA	GENERAL SURGERY	1.3445	9	12.1005	$ 59,794.95	$ 6,643.88
ABA	GENERAL SURGERY	1.352	5	6.76	$ 33,404.72	$ 6,680.94
ABA	GENERAL SURGERY	1.382	7	9.674	$ 47,804.34	$ 6,829.19
ABA	GENERAL SURGERY	1.4443	1	1.4443	$ 7,137.05	$ 7,137.05
ABA	GENERAL SURGERY	1.4559	5	7.2795	$ 35,971.85	$ 7,194.37
ABA	GENERAL SURGERY	1.5133	2	3.0266	$ 14,956.03	$ 7,478.01
ABA	GENERAL SURGERY	1.5238	1	1.5238	$ 7,529.90	$ 7,529.90
ABA	GENERAL SURGERY	1.5479	3	4.6437	$ 22,946.97	$ 7,648.99
ABA	GENERAL SURGERY	1.5499	1	1.5499	$ 7,658.87	$ 7,658.87
ABA	GENERAL SURGERY	1.5906	7	11.1342	$ 55,019.95	$ 7,859.99
ABA	GENERAL SURGERY	1.6238	4	6.4952	$ 32,096.21	$ 8,024.05
ABA	GENERAL SURGERY	1.6431	12	19.7172	$ 97,433.08	$ 8,119.42
ABA	GENERAL SURGERY	1.651	1	1.651	$ 8,158.46	$ 8,158.46
ABA	GENERAL SURGERY	1.6859	1	1.6859	$ 8,330.92	$ 8,330.92
ABA	GENERAL SURGERY	1.7016	17	28.9272	$ 142,944.55	$ 8,408.50
ABA	GENERAL SURGERY	1.7104	12	20.5248	$ 101,423.86	$ 8,451.99
ABA	GENERAL SURGERY	1.7602	1	1.7602	$ 8,698.08	$ 8,698.08
ABA	GENERAL SURGERY	1.7727	1	1.7727	$ 8,759.85	$ 8,759.85
ABA	GENERAL SURGERY	1.9124	1	1.9124	$ 9,450.18	$ 9,450.18
ABA	GENERAL SURGERY	1.9487	1	1.9487	$ 9,629.55	$ 9,629.55
ABA	GENERAL SURGERY	1.9515	1	1.9515	$ 9,643.39	$ 9,643.39
ABA	GENERAL SURGERY	1.9639	1	1.9639	$ 9,704.67	$ 9,704.67
ABA	GENERAL SURGERY	1.9942	1	1.9942	$ 9,854.39	$ 9,854.39
ABA	GENERAL SURGERY	19.9022	8	159.2176	$ 786,778.12	$ 98,347.27
ABA	GENERAL SURGERY	2.0154	4	8.0616	$ 39,836.62	$ 9,959.15
ABA	GENERAL SURGERY	2.1105	6	12.663	$ 62,574.56	$ 10,429.09
ABA	GENERAL SURGERY	2.1829	1	2.1829	$ 10,786.86	$ 10,786.86
ABA	GENERAL SURGERY	2.2757	1	2.2757	$ 11,245.43	$ 11,245.43
ABA	GENERAL SURGERY	2.285	1	2.285	$ 11,291.39	$ 11,291.39
ABA	GENERAL SURGERY	2.3179	4	9.2716	$ 45,815.86	$ 11,453.97
ABA	GENERAL SURGERY	2.4726	1	2.4726	$ 12,218.42	$ 12,218.42
ABA	GENERAL SURGERY	2.4877	2	4.9754	$ 24,586.08	$ 12,293.04
ABA	GENERAL SURGERY	2.5566	1	2.5566	$ 12,633.51	$ 12,633.51
ABA	GENERAL SURGERY	2.5572	1	2.5572	$ 12,636.47	$ 12,636.47
ABA	GENERAL SURGERY	2.6089	1	2.6089	$ 12,891.95	$ 12,891.95
ABA	GENERAL SURGERY	2.9843	1	2.9843	$ 14,747.00	$ 14,747.00
ABA	GENERAL SURGERY	26.9702	1	26.9702	$ 133,273.98	$ 133,273.98
ABA	GENERAL SURGERY	3.0138	3	9.0414	$ 44,678.33	$ 14,892.78
ABA	GENERAL SURGERY	3.0187	1	3.0187	$ 14,916.99	$ 14,916.99
ABA	GENERAL SURGERY	3.078	4	12.312	$ 60,840.08	$ 15,210.02
ABA	GENERAL SURGERY	3.1879	1	3.1879	$ 15,753.09	$ 15,753.09
ABA	GENERAL SURGERY	3.2615	1	3.2615	$ 16,116.79	$ 16,116.79
ABA	GENERAL SURGERY	3.5134	2	7.0268	$ 34,723.12	$ 17,361.56
ABA	GENERAL SURGERY	3.5448	23	81.5304	$ 402,884.70	$ 17,516.73
ABA	GENERAL SURGERY	3.5956	2	7.1912	$ 35,535.51	$ 17,767.76
ABA	GENERAL SURGERY	3.6925	1	3.6925	$ 18,246.59	$ 18,246.59
ABA	GENERAL SURGERY	3.8688	1	3.8688	$ 19,117.78	$ 19,117.78
ABA	GENERAL SURGERY	3.9964	1	3.9964	$ 19,748.32	$ 19,748.32
ABA	GENERAL SURGERY	4.1707	3	12.5121	$ 61,828.88	$ 20,609.63
ABA	GENERAL SURGERY	4.5611	1	4.5611	$ 22,538.80	$ 22,538.80
ABA	GENERAL SURGERY	5.4036	2	10.8072	$ 53,404.07	$ 26,702.04
ABA	GENERAL SURGERY	5.758	5	28.79	$ 142,266.57	$ 28,453.31
ABA	GENERAL SURGERY	6.0443	19	114.8417	$ 567,493.40	$ 29,868.07
ABA	GENERAL SURGERY	7.3286	1	7.3286	$ 36,214.48	$ 36,214.48
ABA	GENERAL SURGERY	8.4291	1	8.4291	$ 41,652.63	$ 41,652.63
Total ABA			**950**	**1246.8704**	$ 6,161,444.16	$1,306,697.46
			RWP <65	386.508		
			Total RWP	1633.3784	At Avg	$ 8,025.19
	Total Expense	$8,071,384.00		$ 4,941.53		

Calculation of Individual Cost:
General Surgery >65 Data for MAMC
Source: MEPRS and CEIS

MEPRS	Service	CW	#	OBD	RWP	Product Cost	Ind Cost
ABA	GENERAL SURGERY	0.4501	1	3	0.4501	$ 2,366.25	$ 2,366.25
ABA	GENERAL SURGERY	0.4535	9	1	4.0815	$ 21,457.16	$ 2,384.13
ABA	GENERAL SURGERY	0.4551	1	1	0.4551	$ 2,392.54	$ 2,392.54
ABA	GENERAL SURGERY	0.4639	1	2	0.4639	$ 2,438.80	$ 2,438.80
ABA	GENERAL SURGERY	0.4718	9	41	4.2462	$ 22,323.01	$ 2,480.33
ABA	GENERAL SURGERY	0.4982	1	2	0.4982	$ 2,619.12	$ 2,619.12
ABA	GENERAL SURGERY	0.5123	4	2	2.0492	$ 10,773.00	$ 2,693.25
ABA	GENERAL SURGERY	0.5172	1	3	0.5172	$ 2,719.01	$ 2,719.01
ABA	GENERAL SURGERY	0.5392	5	13	2.696	$ 14,173.34	$ 2,834.67
ABA	GENERAL SURGERY	0.5423	1	2	0.5423	$ 2,850.97	$ 2,850.97
ABA	GENERAL SURGERY	0.5596	13	59	7.2748	$ 38,244.89	$ 2,941.91
ABA	GENERAL SURGERY	0.565	1	5	0.565	$ 2,970.30	$ 2,970.30
ABA	GENERAL SURGERY	0.5733	1	1	0.5733	$ 3,013.94	$ 3,013.94
ABA	GENERAL SURGERY	0.5912	23	7	13.5976	$ 71,484.95	$ 3,108.04
ABA	GENERAL SURGERY	0.6875	1	3	0.6875	$ 3,614.31	$ 3,614.31
ABA	GENERAL SURGERY	0.6898	1	1	0.6898	$ 3,626.40	$ 3,626.40
ABA	GENERAL SURGERY	0.6937	8	31	5.5496	$ 29,175.21	$ 3,646.90
ABA	GENERAL SURGERY	0.7151	1	1	0.7151	$ 3,759.41	$ 3,759.41
ABA	GENERAL SURGERY	0.7561	2	10	1.5122	$ 7,949.90	$ 3,974.95
ABA	GENERAL SURGERY	0.7564	4	6	3.0256	$ 15,906.11	$ 3,976.53
ABA	GENERAL SURGERY	0.7767	1	3	0.7767	$ 4,083.25	$ 4,083.25
ABA	GENERAL SURGERY	0.7802	5	1	3.901	$ 20,508.24	$ 4,101.65
ABA	GENERAL SURGERY	0.8262	1	1	0.8262	$ 4,343.48	$ 4,343.48
ABA	GENERAL SURGERY	0.8354	1	3	0.8354	$ 4,391.84	$ 4,391.84
ABA	GENERAL SURGERY	0.8355	23	6	19.2165	$ 101,024.49	$ 4,392.37
ABA	GENERAL SURGERY	0.8396	1	1	0.8396	$ 4,413.92	$ 4,413.92
ABA	GENERAL SURGERY	0.8611	5	22	4.3055	$ 22,634.76	$ 4,526.95
ABA	GENERAL SURGERY	0.87	12	4	10.44	$ 54,884.90	$ 4,573.74
ABA	GENERAL SURGERY	0.9083	1	3	0.9083	$ 4,775.09	$ 4,775.09
ABA	GENERAL SURGERY	0.9092	5	11	4.546	$ 23,899.11	$ 4,779.82
ABA	GENERAL SURGERY	0.9203	2	2	1.8406	$ 9,676.35	$ 4,838.18
ABA	GENERAL SURGERY	0.9353	5	13	4.6765	$ 24,585.17	$ 4,917.03
ABA	GENERAL SURGERY	0.9362	1	4	0.9362	$ 4,921.77	$ 4,921.77
ABA	GENERAL SURGERY	0.9549	5	20	4.7745	$ 25,100.38	$ 5,020.08
ABA	GENERAL SURGERY	0.9598	1	5	0.9598	$ 5,045.84	$ 5,045.84
ABA	GENERAL SURGERY	0.9613	1	8	0.9613	$ 5,053.72	$ 5,053.72
ABA	GENERAL SURGERY	0.9629	3	12	2.8887	$ 15,186.40	$ 5,062.13
ABA	GENERAL SURGERY	0.992	2	6	1.984	$ 10,430.23	$ 5,215.12
ABA	GENERAL SURGERY	1.0081	3	13	3.0243	$ 15,899.27	$ 5,299.76
ABA	GENERAL SURGERY	1.0272	4	21	4.1088	$ 21,600.68	$ 5,400.17
ABA	GENERAL SURGERY	1.0325	2	5	2.065	$ 10,856.06	$ 5,428.03
ABA	GENERAL SURGERY	1.033	12	21	12.396	$ 65,167.93	$ 5,430.66
ABA	GENERAL SURGERY	1.0603	1	1	1.0603	$ 5,574.18	$ 5,574.18
ABA	GENERAL SURGERY	1.0709	2	8	2.1418	$ 11,259.82	$ 5,629.91
ABA	GENERAL SURGERY	1.0979	1	4	1.0979	$ 5,771.85	$ 5,771.85
ABA	GENERAL SURGERY	1.1073	6	16	6.6438	$ 34,927.61	$ 5,821.27
ABA	GENERAL SURGERY	1.1182	1	3	1.1182	$ 5,878.57	$ 5,878.57
ABA	GENERAL SURGERY	1.1371	1	7	1.1371	$ 5,977.93	$ 5,977.93
ABA	GENERAL SURGERY	1.1435	11	14	12.5785	$ 66,127.36	$ 6,011.58
ABA	GENERAL SURGERY	1.2106	1	10	1.2106	$ 6,364.33	$ 6,364.33
ABA	GENERAL SURGERY	1.2214	4	22	4.8856	$ 25,684.45	$ 6,421.11
ABA	GENERAL SURGERY	1.2235	6	21	7.341	$ 38,592.91	$ 6,432.15
ABA	GENERAL SURGERY	1.2772	3	18	3.8316	$ 20,143.39	$ 6,714.46
ABA	GENERAL SURGERY	1.3157	1	1	1.3157	$ 6,916.86	$ 6,916.86
ABA	GENERAL SURGERY	1.3445	2	2	2.689	$ 14,136.54	$ 7,068.27
ABA	GENERAL SURGERY	1.352	1	6	1.352	$ 7,107.70	$ 7,107.70
ABA	GENERAL SURGERY	1.4694	1	7	1.4694	$ 7,724.89	$ 7,724.89
ABA	GENERAL SURGERY	1.5607	2	2	3.1214	$ 16,409.74	$ 8,204.87
ABA	GENERAL SURGERY	1.5703	1	2	1.5703	$ 8,255.34	$ 8,255.34

Calculation of Individual Cost:
General Surgery >65 Data for MAMC
Source: MEPRS and CEIS

ABA	GENERAL SURGERY	1.6238	7	3	11.3666	$	59,756.19	$ 8,536.60
ABA	GENERAL SURGERY	1.6941	1	20	1.6941	$	8,906.18	$ 8,906.18
ABA	GENERAL SURGERY	1.7016	8	66	13.6128	$	71,564.86	$ 8,945.61
ABA	GENERAL SURGERY	1.7104	2	3	3.4208	$	17,983.74	$ 8,991.87
ABA	GENERAL SURGERY	1.9124	2	10	3.8248	$	20,107.64	$ 10,053.82
ABA	GENERAL SURGERY	19.9022	3	128	59.7066	$	313,887.99	$ 104,629.33
ABA	GENERAL SURGERY	2.0154	1	5	2.0154	$	10,595.31	$ 10,595.31
ABA	GENERAL SURGERY	2.0493	1	7	2.0493	$	10,773.53	$ 10,773.53
ABA	GENERAL SURGERY	2.1105	9	44	18.9945	$	99,857.39	$ 11,095.27
ABA	GENERAL SURGERY	2.1594	1	9	2.1594	$	11,352.34	$ 11,352.34
ABA	GENERAL SURGERY	2.3179	2	11	4.6358	$	24,371.21	$ 12,185.60
ABA	GENERAL SURGERY	2.3439	2	4	4.6878	$	24,644.58	$ 12,322.29
ABA	GENERAL SURGERY	2.5572	1	5	2.5572	$	13,443.65	$ 13,443.65
ABA	GENERAL SURGERY	2.6687	3	14	8.0061	$	42,089.46	$ 14,029.82
ABA	GENERAL SURGERY	2.7302	1	9	2.7302	$	14,353.14	$ 14,353.14
ABA	GENERAL SURGERY	2.941	12	3	35.292	$	185,536.19	$ 15,461.35
ABA	GENERAL SURGERY	3.0138	2	30	6.0276	$	31,688.14	$ 15,844.07
ABA	GENERAL SURGERY	3.078	4	12	12.312	$	64,726.33	$ 16,181.58
ABA	GENERAL SURGERY	3.0813	1	8	3.0813	$	16,198.93	$ 16,198.93
ABA	GENERAL SURGERY	3.5134	2	11	7.0268	$	36,941.11	$ 18,470.56
ABA	GENERAL SURGERY	3.5448	14	170	49.6272	$	260,898.83	$ 18,635.63
ABA	GENERAL SURGERY	3.5956	1	7	3.5956	$	18,902.70	$ 18,902.70
ABA	GENERAL SURGERY	3.7986	1	5	3.7986	$	19,969.90	$ 19,969.90
ABA	GENERAL SURGERY	3.8048	2	34	7.6096	$	40,004.99	$ 20,002.50
ABA	GENERAL SURGERY	3.939	1	24	3.939	$	20,708.01	$ 20,708.01
ABA	GENERAL SURGERY	4.1707	4	37	16.6828	$	87,704.38	$ 21,926.10
ABA	GENERAL SURGERY	4.4548	1	39	4.4548	$	23,419.66	$ 23,419.66
ABA	GENERAL SURGERY	5.4036	5	47	27.018	$	142,038.33	$ 28,407.67
ABA	GENERAL SURGERY	5.758	1	17	5.758	$	30,270.81	$ 30,270.81
ABA	GENERAL SURGERY	6.0691	1	44	6.0691	$	31,906.32	$ 31,906.32
ABA	GENERAL SURGERY	6.7752	1	44	6.7752	$	35,618.41	$ 35,618.41
ABA	GENERAL SURGERY	8.2189	1	63	8.2189	$	43,208.19	$ 43,208.19
Total 65+			**342**	**1456**	**540.7132**	$	2,842,623.40	$ 933,648.35
				RWP >65	994.5953			
				Total RWP	1535.3085		At Avg	$ 8,527.04
		Total Expense	$ 8,071,384.00			$	5,257.17	

Calculation of Individual Cost:
Cardio-Thoracic Surg <65 Data for MAMC
Source: MEPRS and CEIS

MEPRS	Service	CMI	# Disp	RWP	Product Cost	Ind Cost
ABB	CARDIO-THORACIC SURG	4.5041	1	4.5041	$ 14,901.62	$ 14,901.62
ABB	CARDIO-THORACIC SURG	3.7654	2	7.5308	$ 24,915.33	$ 12,457.66
ABB	CARDIO-THORACIC SURG	2.6432	9	23.7888	$ 78,704.22	$ 8,744.91
ABB	CARDIO-THORACIC SURG	1.7654	7	12.3578	$ 40,885.25	$ 5,840.75
ABB	CARDIO-THORACIC SURG	1.2654	2	2.5308	$ 8,373.04	$ 4,186.52
ABB	CARDIO-THORACIC SURG	1.2422	4	4.9688	$ 16,439.06	$ 4,109.77
ABB	CARDIO-THORACIC SURG	1.0979	3	3.2937	$ 10,897.06	$ 3,632.35
ABB	CARDIO-THORACIC SURG	1.3875	5	6.9375	$ 22,952.42	$ 4,590.48
ABB	CARDIO-THORACIC SURG	0.6666	12	7.9992	$ 26,465.01	$ 2,205.42
ABB	CARDIO-THORACIC SURG	1.4133	3	4.2399	$ 14,027.53	$ 4,675.84
ABB	CARDIO-THORACIC SURG	0.464	1	0.464	$ 1,535.12	$ 1,535.12
ABB	CARDIO-THORACIC SURG	0.4955	12	5.946	$ 19,672.08	$ 1,639.34
ABB	CARDIO-THORACIC SURG	0.5123	1	0.5123	$ 1,694.92	$ 1,694.92
ABB	CARDIO-THORACIC SURG	0.5733	3	1.7199	$ 5,690.22	$ 1,896.74
ABB	CARDIO-THORACIC SURG	0.6399	1	0.6399	$ 2,117.08	$ 2,117.08
ABB	CARDIO-THORACIC SURG	0.6666	1	0.6666	$ 2,205.42	$ 2,205.42
ABB	CARDIO-THORACIC SURG	0.6937	3	2.0811	$ 6,885.23	$ 2,295.08
ABB	CARDIO-THORACIC SURG	0.7551	11	8.3061	$ 27,480.37	$ 2,498.22
ABB	CARDIO-THORACIC SURG	0.9203	4	3.6812	$ 12,179.09	$ 3,044.77
ABB	CARDIO-THORACIC SURG	0.9919	1	0.9919	$ 3,281.66	$ 3,281.66
ABB	CARDIO-THORACIC SURG	1.0979	4	4.3916	$ 14,529.42	$ 3,632.35
ABB	CARDIO-THORACIC SURG	1.1371	1	1.1371	$ 3,762.05	$ 3,762.05
ABB	CARDIO-THORACIC SURG	1.1929	1	1.1929	$ 3,946.66	$ 3,946.66
ABB	CARDIO-THORACIC SURG	1.2422	14	17.3908	$ 57,536.71	$ 4,109.77
ABB	CARDIO-THORACIC SURG	1.2614	1	1.2614	$ 4,173.29	$ 4,173.29
ABB	CARDIO-THORACIC SURG	1.2858	6	7.7148	$ 25,524.08	$ 4,254.01
ABB	CARDIO-THORACIC SURG	1.3875	1	1.3875	$ 4,590.48	$ 4,590.48
ABB	CARDIO-THORACIC SURG	1.4133	2	2.8266	$ 9,351.68	$ 4,675.84
ABB	CARDIO-THORACIC SURG	1.5313	1	1.5313	$ 5,066.24	$ 5,066.24
ABB	CARDIO-THORACIC SURG	1.5479	13	20.1227	$ 66,575.09	$ 5,121.16
ABB	CARDIO-THORACIC SURG	1.5607	1	1.5607	$ 5,163.51	$ 5,163.51
ABB	CARDIO-THORACIC SURG	1.7715	1	1.7715	$ 5,860.93	$ 5,860.93
ABB	CARDIO-THORACIC SURG	1.923	1	1.923	$ 6,362.16	$ 6,362.16
ABB	CARDIO-THORACIC SURG	13.7323	12	164.7876	$ 545,192.67	$ 45,432.72
ABB	CARDIO-THORACIC SURG	15.3358	9	138.0222	$ 456,640.50	$ 50,737.83
ABB	CARDIO-THORACIC SURG	2.1829	1	2.1829	$ 7,222.03	$ 7,222.03
ABB	CARDIO-THORACIC SURG	2.2502	17	38.2534	$ 126,559.73	$ 7,444.69
ABB	CARDIO-THORACIC SURG	2.2757	1	2.2757	$ 7,529.06	$ 7,529.06
ABB	CARDIO-THORACIC SURG	2.462	1	2.462	$ 8,145.42	$ 8,145.42
ABB	CARDIO-THORACIC SURG	2.4726	3	7.4178	$ 24,541.47	$ 8,180.49
ABB	CARDIO-THORACIC SURG	2.7302	1	2.7302	$ 9,032.75	$ 9,032.75
ABB	CARDIO-THORACIC SURG	3.2615	15	48.9225	$ 161,857.98	$ 10,790.53
ABB	CARDIO-THORACIC SURG	3.5098	1	3.5098	$ 11,612.02	$ 11,612.02
ABB	CARDIO-THORACIC SURG	3.939	2	7.878	$ 26,064.02	$ 13,032.01
ABB	CARDIO-THORACIC SURG	4.1707	1	4.1707	$ 13,798.58	$ 13,798.58
ABB	CARDIO-THORACIC SURG	4.5041	20	90.082	$ 298,032.42	$ 14,901.62
ABB	CARDIO-THORACIC SURG	5.7182	4	22.8728	$ 75,673.67	$ 18,918.42
ABB	CARDIO-THORACIC SURG	5.7373	1	5.7373	$ 18,981.61	$ 18,981.61
ABB	CARDIO-THORACIC SURG	5.758	1	5.758	$ 19,050.09	$ 19,050.09
ABB	CARDIO-THORACIC SURG	6.1094	12	73.3128	$ 242,552.24	$ 20,212.69
ABB	CARDIO-THORACIC SURG	8.5547	1	8.5547	$ 28,302.86	$ 28,302.86
			262	**718.1513**	$ 2,375,972.63	
			RWP <-65	281.8451		
			Total RWP	999.9964	At Avg	$ 12,338.08
	Total Expense	$ 3,308,445.00		$ 3,308.46		

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Calculation of Individual Cost:
Cardio-Thoracic Surg >65 Data for MAMC
Source: MEPRS and CEIS

MEPRS	Service	CMI	# Disp	RWP	Product Cost	Indiv Cost
ABB	CARDIO-THORACIC SURG	2.2757	15	34.1355	$ 120,287.09	$ 8,019.14
ABB	CARDIO-THORACIC SURG	1.1678	6	7.0068	$ 24,690.65	$ 4,115.11
ABB	CARDIO-THORACIC SURG	3.2615	22	71.753	$ 252,844.10	$ 11,492.91
ABB	CARDIO-THORACIC SURG	0.464	4	1.856	$ 6,540.20	$ 1,635.05
ABB	CARDIO-THORACIC SURG	0.5733	1	0.5733	$ 2,020.20	$ 2,020.20
ABB	CARDIO-THORACIC SURG	0.6399	20	12.798	$ 45,097.75	$ 2,254.89
ABB	CARDIO-THORACIC SURG	0.6666	1	0.6666	$ 2,348.97	$ 2,348.97
ABB	CARDIO-THORACIC SURG	0.7627	7	5.3389	$ 18,813.28	$ 2,687.61
ABB	CARDIO-THORACIC SURG	0.9057	1	0.9057	$ 3,191.52	$ 3,191.52
ABB	CARDIO-THORACIC SURG	0.9203	2	1.8406	$ 6,485.93	$ 3,242.96
ABB	CARDIO-THORACIC SURG	0.9362	4	3.7448	$ 13,195.97	$ 3,298.99
ABB	CARDIO-THORACIC SURG	0.9668	1	0.9668	$ 3,406.82	$ 3,406.82
ABB	CARDIO-THORACIC SURG	1.0589	2	2.1178	$ 7,462.73	$ 3,731.36
ABB	CARDIO-THORACIC SURG	1.1678	2	2.3356	$ 8,230.22	$ 4,115.11
ABB	CARDIO-THORACIC SURG	1.2422	2	2.4844	$ 8,754.56	$ 4,377.28
ABB	CARDIO-THORACIC SURG	1.2858	6	7.7148	$ 27,185.51	$ 4,530.92
ABB	CARDIO-THORACIC SURG	1.4694	1	1.4694	$ 5,177.89	$ 5,177.89
ABB	CARDIO-THORACIC SURG	2.2757	1	2.2757	$ 8,019.14	$ 8,019.14
ABB	CARDIO-THORACIC SURG	2.298	19	43.662	$ 153,856.69	$ 8,097.72
ABB	CARDIO-THORACIC SURG	2.462	3	7.386	$ 26,026.88	$ 8,675.63
ABB	CARDIO-THORACIC SURG	2.7302	1	2.7302	$ 9,620.71	$ 9,620.71
ABB	CARDIO-THORACIC SURG	2.8922	2	5.7844	$ 20,383.14	$ 10,191.57
ABB	CARDIO-THORACIC SURG	3.2615	11	35.8765	$ 126,422.05	$ 11,492.91
ABB	CARDIO-THORACIC SURG	3.5098	6	21.0588	$ 74,207.26	$ 12,367.88
ABB	CARDIO-THORACIC SURG	4.5041	11	49.5451	$ 174,587.63	$ 15,871.60
ABB	CARDIO-THORACIC SURG	4.5611	3	13.6833	$ 48,217.38	$ 16,072.46
ABB	CARDIO-THORACIC SURG	4.7371	2	9.4742	$ 33,385.30	$ 16,692.65
ABB	CARDIO-THORACIC SURG	5.4477	13	70.8201	$ 249,556.74	$ 19,196.67
ABB	CARDIO-THORACIC SURG	5.6836	1	5.6836	$ 20,027.94	$ 20,027.94
ABB	CARDIO-THORACIC SURG	5.7182	22	125.8004	$ 443,297.00	$ 20,149.86
ABB	CARDIO-THORACIC SURG	6.1094	18	109.9692	$ 387,510.82	$ 21,528.38
ABB	CARDIO-THORACIC SURG	6.8631	2	13.7262	$ 48,368.55	$ 24,184.28
ABB	CARDIO-THORACIC SURG	8.5547	2	17.1094	$ 60,290.31	$ 30,145.16
ABB	CARDIO-THORACIC SURG	8.8143	1	8.8143	$ 31,059.94	$ 31,059.94
Total ABB 65+			**172**	**588.2121**	$ 2,072,749.03	
			RWP >-65	350.6702		
			Total RWP	938.8823		
					At Avg	$ 13,400.73
	Total Expense	$ 3,308,445.00		3523.8123		

Calculation of Individual Cost:
Neuro Surgery <65 Data for MAMC
Source: MEPRS and CEIS

MEPRS	Service	CMI	# Disp	RWP	Product $	Indiv Cost
ABD	NEUROSURGERY	0.4404	1	0.4404	$ 1,399.00	$ 1,399.00
ABD	NEUROSURGERY	0.519	2	1.038	$ 3,297.37	$ 1,648.69
ABD	NEUROSURGERY	0.595	3	1.785	$ 5,670.33	$ 1,890.11
ABD	NEUROSURGERY	0.5986	1	0.5986	$ 1,901.55	$ 1,901.55
ABD	NEUROSURGERY	0.6379	22	14.0338	$ 44,580.57	$ 2,026.39
ABD	NEUROSURGERY	0.6677	1	0.6677	$ 2,121.05	$ 2,121.05
ABD	NEUROSURGERY	0.9203	7	6.4421	$ 20,464.34	$ 2,923.48
ABD	NEUROSURGERY	1.0172	1	1.0172	$ 3,231.30	$ 3,231.30
ABD	NEUROSURGERY	1.1348	2	2.2696	$ 7,209.74	$ 3,604.87
ABD	NEUROSURGERY	1.143	5	5.715	$ 18,154.60	$ 3,630.92
ABD	NEUROSURGERY	1.2521	77	96.4117	$ 306,266.92	$ 3,977.49
ABD	NEUROSURGERY	1.2976	1	1.2976	$ 4,122.03	$ 4,122.03
ABD	NEUROSURGERY	1.3157	5	6.5785	$ 20,897.64	$ 4,179.53
ABD	NEUROSURGERY	1.3875	1	1.3875	$ 4,407.61	$ 4,407.61
ABD	NEUROSURGERY	1.4443	35	50.5505	$ 160,581.61	$ 4,588.05
ABD	NEUROSURGERY	1.4775	1	1.4775	$ 4,693.51	$ 4,693.51
ABD	NEUROSURGERY	1.5906	4	6.3624	$ 20,211.16	$ 5,052.79
ABD	NEUROSURGERY	19.9022	3	59.7066	$ 189,667.40	$ 63,222.47
ABD	NEUROSURGERY	2.0836	2	4.1672	$ 13,237.77	$ 6,618.88
ABD	NEUROSURGERY	2.2502	10	22.502	$ 71,481.14	$ 7,148.11
ABD	NEUROSURGERY	2.298	11	25.278	$ 80,299.54	$ 7,299.96
ABD	NEUROSURGERY	2.629	2	5.258	$ 16,702.86	$ 8,351.43
ABD	NEUROSURGERY	3.0138	3	9.0414	$ 28,721.43	$ 9,573.81
ABD	NEUROSURGERY	3.2781	5	16.3905	$ 52,067.00	$ 10,413.40
ABD	NEUROSURGERY	3.5098	1	3.5098	$ 11,149.43	$ 11,149.43
ABD	NEUROSURGERY	3.6925	3	11.0775	$ 35,189.42	$ 11,729.81
ABD	NEUROSURGERY	3.7743	17	64.1631	$ 203,824.17	$ 11,989.66
ABD	NEUROSURGERY	4.1761	5	20.8805	$ 66,330.19	$ 13,266.04
ABD	NEUROSURGERY	4.2026	1	4.2026	$ 13,350.22	$ 13,350.22
ABD	NEUROSURGERY	5.8814	7	41.1698	$ 130,782.34	$ 18,683.19
ABD	NEUROSURGERY	7.0046	2	14.0092	$ 44,502.43	$ 22,251.21
ABD	NEUROSURGERY	7.601	1	7.601	$ 24,145.77	$ 24,145.77
Total ABD			**242**	**507.0303**	$ 1,610,661.44	
			RWP <-65	77.079		
			Total RWP	584.1093	At Avg	$ 7,452.91
	Total Expense	$ 1,855,515.00		$ 3,176.66		

Calculation of Individual Cost:
Neuro Surgery >65 Data for MAMC
Source: MEPRS and CEIS

MEPRS	Service	CMI	# Disp	RWP	Product $	Indiv Cost
ABD	NEUROSURGERY	0.5668	1	0.5668	$ 2,486.32	$ 2,486.32
ABD	NEUROSURGERY	0.6379	1	0.6379	$ 2,798.20	$ 2,798.20
ABD	NEUROSURGERY	0.7454	1	0.7454	$ 3,269.76	$ 3,269.76
ABD	NEUROSURGERY	0.8152	1	0.8152	$ 3,575.94	$ 3,575.94
ABD	NEUROSURGERY	1.1348	1	1.1348	$ 4,977.89	$ 4,977.89
ABD	NEUROSURGERY	1.2521	3	3.7563	$ 16,477.32	$ 5,492.44
ABD	NEUROSURGERY	1.3157	1	1.3157	$ 5,771.43	$ 5,771.43
ABD	NEUROSURGERY	1.3875	1	1.3875	$ 6,086.38	$ 6,086.38
ABD	NEUROSURGERY	1.4443	1	1.4443	$ 6,335.54	$ 6,335.54
ABD	NEUROSURGERY	2.0836	2	4.1672	$ 18,279.77	$ 9,139.88
ABD	NEUROSURGERY	2.2502	1	2.2502	$ 9,870.69	$ 9,870.69
ABD	NEUROSURGERY	2.298	2	4.596	$ 20,160.74	$ 10,080.37
ABD	NEUROSURGERY	3.5098	1	3.5098	$ 15,396.03	$ 15,396.03
ABD	NEUROSURGERY	3.6925	2	7.385	$ 32,394.92	$ 16,197.46
ABD	NEUROSURGERY	3.7743	5	18.8715	$ 82,781.40	$ 16,556.28
Total ABD 65+			**24**	**52.5836**		
			RWP >-65	370.4142		
			Total RWP	422.9978		
					At Avg	$ 8,365.28
	Total Expense	$ 1,855,515.00		$ 4,386.58		

Calculation of Individual Cost:
Ophthalmology <65 Data for MAMC
Source: MEPRS and CEIS

MEPRS	Service	CMI	# Disp	RWP	Product $	Indiv $
ABE	OPHTHALMOLOGY	0.1006	4	0.4024	$ 22,804.64	$ 5,701.16
ABE	OPHTHALMOLOGY	0.116	3	0.348	$ 19,721.71	$ 6,573.90
ABE	OPHTHALMOLOGY	0.1216	8	0.9728	$ 55,130.11	$ 6,891.26
ABE	OPHTHALMOLOGY	0.14	2	0.28	$ 15,868.04	$ 7,934.02
ABE	OPHTHALMOLOGY	0.1575	2	0.315	$ 17,851.55	$ 8,925.77
ABE	OPHTHALMOLOGY	0.197	4	0.788	$ 44,657.20	$ 11,164.30
ABE	OPHTHALMOLOGY	0.2285	2	0.457	$ 25,898.91	$ 12,949.46
ABE	OPHTHALMOLOGY	0.246	1	0.246	$ 13,941.21	$ 13,941.21
ABE	OPHTHALMOLOGY	0.3003	2	0.6006	$ 34,036.95	$ 17,018.47
ABE	OPHTHALMOLOGY	0.4184	1	0.4184	$ 23,711.39	$ 23,711.39
ABE	OPHTHALMOLOGY	0.43	2	0.86	$ 48,737.56	$ 24,368.78
ABE	OPHTHALMOLOGY	0.4435	1	0.4435	$ 25,133.84	$ 25,133.84
ABE	OPHTHALMOLOGY	0.4772	4	1.9088	$ 108,174.70	$ 27,043.68
ABE	OPHTHALMOLOGY	0.51133	11	5.62463	$ 318,756.65	$ 28,977.88
ABE	OPHTHALMOLOGY	0.5538	5	2.769	$ 156,923.59	$ 31,384.72
ABE	OPHTHALMOLOGY	0.8019	1	0.8019	$ 45,444.94	$ 45,444.94
ABE	OPHTHALMOLOGY	0.8122	1	0.8122	$ 46,028.65	$ 46,028.65
ABE	OPHTHALMOLOGY	0.9227	2	1.8454	$ 104,581.73	$ 52,290.86
Total ABE			**56**	**16.78743**	$ 951,370.11	
			RWP <-65	4.0506		
			Total RWP	20.83803	At Avg	$ 16,352.25
	Total Expense	$ 1,180,924.00		$ 56,671.58		

Calculation of Individual Cost:
Ophthalmology >65 Data for MAMC
Source: MEPRS and CEIS

MEPRS	Service	CMI	# Disp	RWP	Product $	Indiv $
ABE	OPHTHALMOLOGY	0.3184	2	0.6368	$36,106.88	$ 18,053.44
ABE	OPHTHALMOLOGY	0.493	2	0.986	$55,906.69	$ 27,953.35
ABE	OPHTHALMOLOGY	0.7538	2	1.5076	$85,481.67	$ 42,740.84
ABE	OPHTHALMOLOGY	0.9202	1	0.9202	$52,175.80	$ 52,175.80
Total ABE 65+			**7**	**4.0506**	$229,671.05	
			RWP >-65	16.7768		
			Total RWP	20.8274		
					At Avg	$ 17,728.92
	Total Expense	$ 1,180,924.00		$ 56,700.50		

Calculation of Individual Cost:
Oral Surgery <65 Data for MAMC
Source: MEPRS and CEIS

MEPRS	Service	CMI	# Disp	RWP	Product $	Indiv $
ABF	ORAL SURGERY	0.7431	13	9.6603	$44,324.56	$ 3,409.58
ABF	ORAL SURGERY	0.8262	6	4.9572	$22,745.23	$ 3,790.87
ABF	ORAL SURGERY	0.9203	4	3.6812	$16,890.53	$ 4,222.63
ABF	ORAL SURGERY	0.9394	3	2.8182	$12,930.81	$ 4,310.27
ABF	ORAL SURGERY	0.9552	3	2.8656	$13,148.29	$ 4,382.76
ABF	ORAL SURGERY	1.0083	12	12.0996	$55,516.85	$ 4,626.40
ABF	ORAL SURGERY	1.1393	2	2.2786	$10,454.95	$ 5,227.47
ABF	ORAL SURGERY	1.259	2	2.518	$11,553.39	$ 5,776.70
ABF	ORAL SURGERY	1.3659	31	42.3429	$194,282.83	$ 6,267.19
ABF	ORAL SURGERY	1.4133	3	4.2399	$19,454.02	$ 6,484.67
ABF	ORAL SURGERY	1.5133	1	1.5133	$6,943.51	$ 6,943.51
ABF	ORAL SURGERY	1.651	2	3.302	$15,150.64	$ 7,575.32
ABF	ORAL SURGERY	12.018	2	24.036	$110,284.89	$ 55,142.44
ABF	ORAL SURGERY	2.2757	2	4.5514	$20,883.29	$ 10,441.64
ABF	ORAL SURGERY	2.5566	1	2.5566	$11,730.50	$ 11,730.50
ABF	ORAL SURGERY	3.0138	1	3.0138	$13,828.28	$ 13,828.28
ABF	ORAL SURGERY	3.5098	3	10.5294	$48,312.27	$ 16,104.09
Total ABF			**91**	**136.964**	$628,434.83	
			RWP <-65	3.3845		
			Total RWP	140.3485	At Avg	$ 4,169.33
	Total Expense	$ 643,964.00		$ 4,588.32		

Calculation of Individual Cost:
Oral Surgery >65 Data for MAMC
Source: MEPRS and CEIS

MEPRS	Service	CMI	# Disp	RWP	Product $	Indiv $
ABF	ORAL SURGERY	0.5416	2	1.0832	$4,970.07	$ 2,485.03
ABF	ORAL SURGERY	0.7596	1	0.7596	$3,485.29	$ 3,485.29
ABF	ORAL SURGERY	1.259	1	1.259	$5,776.70	$ 5,776.70
ABF	ORAL SURGERY	1.3659	1	1.3659	$6,267.19	$ 6,267.19
Total ABF 65+			**5**	**3.3845**	$15,529.17	
			RWP >-65	136.964		
			Total RWP	140.3485		
					At Avg	$ 7,917.55
	Total Expense	$ 643,964.00		$ 4,588.32		

Calculation of Individual Cost:
Otolaryngology <65 Data for MAMC
Source: MEPRS and CEIS

MEPRS	Service	CMI	# Disp	RWP	Product $	Indiv $
ABG	OTOLARYNGOLOGY	0.4404	9	3.9636	$39,572.85	$ 4,396.98
ABG	OTOLARYNGOLOGY	0.4637	13	6.0281	$60,184.95	$ 4,629.61
ABG	OTOLARYNGOLOGY	0.4693	1	0.4693	$4,685.52	$ 4,685.52
ABG	OTOLARYNGOLOGY	0.4889	2	0.9778	$9,762.42	$ 4,881.21
ABG	OTOLARYNGOLOGY	0.5123	22	11.2706	$112,526.42	$ 5,114.84
ABG	OTOLARYNGOLOGY	0.56	2	1.12	$11,182.15	$ 5,591.08
ABG	OTOLARYNGOLOGY	0.565	4	2.26	$22,563.99	$ 5,641.00
ABG	OTOLARYNGOLOGY	0.5784	1	0.5784	$5,774.78	$ 5,774.78
ABG	OTOLARYNGOLOGY	0.634	21	13.314	$132,927.86	$ 6,329.90
ABG	OTOLARYNGOLOGY	0.678	6	4.068	$40,615.18	$ 6,769.20
ABG	OTOLARYNGOLOGY	0.7345	1	0.7345	$7,333.30	$ 7,333.30
ABG	OTOLARYNGOLOGY	0.7369	9	6.6321	$66,215.33	$ 7,357.26
ABG	OTOLARYNGOLOGY	0.8262	2	1.6524	$16,497.67	$ 8,248.84
ABG	OTOLARYNGOLOGY	0.8868	14	12.4152	$123,954.18	$ 8,853.87
ABG	OTOLARYNGOLOGY	0.9307	1	0.9307	$9,292.17	$ 9,292.17
ABG	OTOLARYNGOLOGY	0.9394	7	6.5758	$65,653.22	$ 9,379.03
ABG	OTOLARYNGOLOGY	0.9552	6	5.7312	$57,220.68	$ 9,536.78
ABG	OTOLARYNGOLOGY	1.0083	8	8.0664	$80,535.47	$ 10,066.93
ABG	OTOLARYNGOLOGY	1.0463	1	1.0463	$10,446.33	$ 10,446.33
ABG	OTOLARYNGOLOGY	1.1393	2	2.2786	$22,749.69	$ 11,374.85
ABG	OTOLARYNGOLOGY	1.143	12	13.716	$136,941.46	$ 11,411.79
ABG	OTOLARYNGOLOGY	1.196	1	1.196	$11,940.94	$ 11,940.94
ABG	OTOLARYNGOLOGY	1.2022	2	2.4044	$24,005.69	$ 12,002.84
ABG	OTOLARYNGOLOGY	1.2422	1	1.2422	$12,402.21	$ 12,402.21
ABG	OTOLARYNGOLOGY	1.259	1	1.259	$12,569.94	$ 12,569.94
ABG	OTOLARYNGOLOGY	1.2677	2	2.5354	$25,313.60	$ 12,656.80
ABG	OTOLARYNGOLOGY	1.2858	2	2.5716	$25,675.03	$ 12,837.51
ABG	OTOLARYNGOLOGY	1.3157	1	1.3157	$13,136.04	$ 13,136.04
ABG	OTOLARYNGOLOGY	1.3528	1	1.3528	$13,506.45	$ 13,506.45
ABG	OTOLARYNGOLOGY	1.3659	3	4.0977	$40,911.71	$ 13,637.24
ABG	OTOLARYNGOLOGY	1.5446	1	1.5446	$15,421.39	$ 15,421.39
ABG	OTOLARYNGOLOGY	1.5479	2	3.0958	$30,908.67	$ 15,454.34
ABG	OTOLARYNGOLOGY	1.6238	1	1.6238	$16,212.13	$ 16,212.13
ABG	OTOLARYNGOLOGY	1.7727	1	1.7727	$17,698.75	$ 17,698.75
ABG	OTOLARYNGOLOGY	2.2819	3	6.8457	$68,347.92	$ 22,782.64
ABG	OTOLARYNGOLOGY	2.7302	1	2.7302	$27,258.50	$ 27,258.50
ABG	OTOLARYNGOLOGY	2.7681	3	8.3043	$82,910.68	$ 27,636.89
ABG	OTOLARYNGOLOGY	3.0138	1	3.0138	$30,089.98	$ 30,089.98
ABG	OTOLARYNGOLOGY	3.6925	1	3.6925	$36,866.17	$ 36,866.17
ABG	OTOLARYNGOLOGY	3.939	2	7.878	$78,654.48	$ 39,327.24
ABG	OTOLARYNGOLOGY	8.2935	1	8.2935	$82,802.86	$ 82,802.86
Total ABG			**175**	**170.5987**	$1,703,268.77	
			RWP <-65	34.1903		
			Total RWP	204.789	At Avg	$ 12,365.49
	Total Expense	$ 2,044,627.00		$ 9,984.07		

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Calculation of Individual Cost:
Otolaryngology >65 Data for MAMC
Source: MEPRS and CEIS

MEPRS	Service	CMI	# Disp	RWP	Product $	Indiv $
ABG	OTOLARYNGOLOGY	0.4804	2	0.9608	$9,592.69	$ 4,796.35
ABG	OTOLARYNGOLOGY	0.4964	4	1.9856	$19,824.36	$ 4,956.09
ABG	OTOLARYNGOLOGY	0.5795	3	1.7385	$17,357.30	$ 5,785.77
ABG	OTOLARYNGOLOGY	0.5957	2	1.1914	$11,895.02	$ 5,947.51
ABG	OTOLARYNGOLOGY	0.6813	1	0.6813	$6,802.14	$ 6,802.14
ABG	OTOLARYNGOLOGY	0.6983	3	2.0949	$20,915.62	$ 6,971.87
ABG	OTOLARYNGOLOGY	0.7959	1	0.7959	$7,946.32	$ 7,946.32
ABG	OTOLARYNGOLOGY	0.8707	1	0.8707	$8,693.13	$ 8,693.13
ABG	OTOLARYNGOLOGY	0.9226	2	1.8452	$18,422.60	$ 9,211.30
ABG	OTOLARYNGOLOGY	1.8281	1	1.8281	$18,251.87	$ 18,251.87
ABG	OTOLARYNGOLOGY	2.7138	2	5.4276	$54,189.52	$ 27,094.76
ABG	OTOLARYNGOLOGY	3.1219	2	6.2438	$62,338.51	$ 31,169.26
ABG	OTOLARYNGOLOGY	4.2094	1	4.2094	$42,026.93	$ 42,026.93
ABG	OTOLARYNGOLOGY	4.3171	1	4.3171	$43,102.21	$ 43,102.21
Total ABG 65+			**26**	**34.1903**	$341,358.23	
			RWP >-65	170.5987		
			Total RWP	204.789		
					At Avg	$ 20,468.49
	Total Expense	$ 2,044,627.00		$ 9,984.07		

Calculation of Individual Cost:
Plastic Surgery <65 Data for MAMC
Source: MEPRS and CEIS

MEPRS	Service	CMI	# Disp	RWP	Product $	Indiv $
ABI	PLASTIC SURGERY	0.4404	4	1.7616	$12,647.71	$ 3,161.93
ABI	PLASTIC SURGERY	0.5912	6	3.5472	$25,467.73	$ 4,244.62
ABI	PLASTIC SURGERY	0.5928	2	1.1856	$8,512.22	$ 4,256.11
ABI	PLASTIC SURGERY	0.6206	2	1.2412	$8,911.41	$ 4,455.70
ABI	PLASTIC SURGERY	0.7396	1	0.7396	$5,310.08	$ 5,310.08
ABI	PLASTIC SURGERY	0.8819	2	1.7638	$12,663.50	$ 6,331.75
ABI	PLASTIC SURGERY	0.9203	1	0.9203	$6,607.45	$ 6,607.45
ABI	PLASTIC SURGERY	1.0588	6	6.3528	$45,611.01	$ 7,601.83
ABI	PLASTIC SURGERY	1.0993	37	40.6741	$292,026.62	$ 7,892.61
ABI	PLASTIC SURGERY	1.1182	6	6.7092	$48,169.84	$ 8,028.31
ABI	PLASTIC SURGERY	1.3157	2	2.6314	$18,892.58	$ 9,446.29
ABI	PLASTIC SURGERY	1.3206	31	40.9386	$293,925.64	$ 9,481.47
ABI	PLASTIC SURGERY	1.3752	2	2.7504	$19,746.96	$ 9,873.48
ABI	PLASTIC SURGERY	1.6577	1	1.6577	$11,901.74	$ 11,901.74
ABI	PLASTIC SURGERY	1.7727	4	7.0908	$50,909.60	$ 12,727.40
ABI	PLASTIC SURGERY	1.773	22	39.006	$280,050.21	$ 12,729.55
ABI	PLASTIC SURGERY	1.9368	2	3.8736	$27,811.17	$ 13,905.58
ABI	PLASTIC SURGERY	2.2345	1	2.2345	$16,042.97	$ 16,042.97
ABI	PLASTIC SURGERY	2.5345	3	7.6035	$54,590.62	$ 18,196.87
Total ABI			**135**	**172.6819**	$405,110.01	
			RWP <-65	12.3649		
			Total RWP	185.0468	At Avg	$ 5,745.28
	Total Expense	$ 397,806.00		$ 7,179.67		

Calculation of Individual Cost:
Plastic Surgery >65 Data for MAMC
Source: MEPRS and CEIS

MEPRS	Service	CMI	# Disp	OBD	RWP	Product $	Indiv $
ABI	PLASTIC SURGERY	1.0995	1	1	1.0995	$7,894.05	$ 7,894.05
ABI	PLASTIC SURGERY	1.3206	2	2	2.6412	$18,962.94	$ 9,481.47
ABI	PLASTIC SURGERY	2.5572	2	12	5.1144	$36,719.70	$ 18,359.85
ABI	PLASTIC SURGERY	3.5098	1	18	3.5098	$25,199.21	$ 25,199.21
Total ABI 65+			**6**	**33**	**12.3649**	$88,775.90	
			RWP >-65		172.6819		
			Total RWP		185.0468		
						At Avg	$ 8,584.29
	Total Expense	$ 397,806.00			$ 7,179.67		

Calculation of Individual Cost:
Urology <65 Data for MAMC
Source: MEPRS and CEIS

MEPRS	Service	CMI	# Disp	RWP	Product $	Indiv $
ABK	UROLOGY	0.407	4	1.628	$8,474.62	$ 2,118.65
ABK	UROLOGY	0.4679	2	0.9358	$4,871.34	$ 2,435.67
ABK	UROLOGY	0.4899	1	0.4899	$2,550.19	$ 2,550.19
ABK	UROLOGY	0.5096	4	2.0384	$10,610.97	$ 2,652.74
ABK	UROLOGY	0.5223	3	1.5669	$8,156.56	$ 2,718.85
ABK	UROLOGY	0.5596	2	1.1192	$5,826.04	$ 2,913.02
ABK	UROLOGY	0.5876	6	3.5256	$18,352.65	$ 3,058.78
ABK	UROLOGY	0.5877	2	1.1754	$6,118.59	$ 3,059.30
ABK	UROLOGY	0.6708	6	4.0248	$20,951.26	$ 3,491.88
ABK	UROLOGY	0.6847	11	7.5317	$39,206.57	$ 3,564.23
ABK	UROLOGY	0.7049	2	1.4098	$7,338.77	$ 3,669.39
ABK	UROLOGY	0.7741	9	6.9669	$36,266.48	$ 4,029.61
ABK	UROLOGY	0.8025	7	5.6175	$29,242.12	$ 4,177.45
ABK	UROLOGY	0.87	2	1.74	$9,057.64	$ 4,528.82
ABK	UROLOGY	0.9011	4	3.6044	$18,762.85	$ 4,690.71
ABK	UROLOGY	0.9884	2	1.9768	$10,290.31	$ 5,145.16
ABK	UROLOGY	0.992	1	0.992	$5,163.90	$ 5,163.90
ABK	UROLOGY	1.0485	1	1.0485	$5,458.01	$ 5,458.01
ABK	UROLOGY	1.0499	3	3.1497	$16,395.89	$ 5,465.30
ABK	UROLOGY	1.0589	1	1.0589	$5,512.15	$ 5,512.15
ABK	UROLOGY	1.0865	3	3.2595	$16,967.46	$ 5,655.82
ABK	UROLOGY	1.1071	2	2.2142	$11,526.11	$ 5,763.05
ABK	UROLOGY	1.1295	1	1.1295	$5,879.66	$ 5,879.66
ABK	UROLOGY	1.1954	8	9.5632	$49,781.62	$ 6,222.70
ABK	UROLOGY	1.2301	2	2.4602	$12,806.67	$ 6,403.33
ABK	UROLOGY	1.3157	1	1.3157	$6,848.93	$ 6,848.93
ABK	UROLOGY	1.4843	14	20.7802	$108,172.16	$ 7,726.58
ABK	UROLOGY	1.4899	7	10.4293	$54,290.14	$ 7,755.73
ABK	UROLOGY	1.6441	2	3.2882	$17,116.86	$ 8,558.43
ABK	UROLOGY	1.7727	2	3.5454	$18,455.72	$ 9,227.86
ABK	UROLOGY	1.8074	5	9.037	$47,042.46	$ 9,408.49
ABK	UROLOGY	1.8097	3	5.4291	$28,261.40	$ 9,420.47
ABK	UROLOGY	2.0836	1	2.0836	$10,846.26	$ 10,846.26
ABK	UROLOGY	2.1107	2	4.2214	$21,974.67	$ 10,987.33
ABK	UROLOGY	2.2479	2	4.4958	$23,403.07	$ 11,701.53
ABK	UROLOGY	2.4726	1	2.4726	$12,871.22	$ 12,871.22
ABK	UROLOGY	2.5126	3	7.5378	$39,238.32	$ 13,079.44
ABK	UROLOGY	3.0138	1	3.0138	$15,688.46	$ 15,688.46
ABK	UROLOGY	6.0443	1	6.0443	$31,463.85	$ 31,463.85
Total ABK			**134**	**153.921**	$801,241.92	
			RWP <-65	60.8452		
			Total RWP	214.7662	At Avg	$ 5,794.06
	Total Expense	$ 2,198,603.00		$ 5,205.54		

Calculation of Individual Cost:
Urology >65 Data for MAMC
Source: MEPRS and CEIS

MEPRS	Service	CMI	# Disp	RWP	Product $	Indiv $
ABK	UROLOGY	0.407	2	0.814	$4,237.31	$ 2,118.65
ABK	UROLOGY	0.4551	1	0.4551	$2,369.04	$ 2,369.04
ABK	UROLOGY	0.5096	1	0.5096	$2,652.74	$ 2,652.74
ABK	UROLOGY	0.5877	2	1.1754	$6,118.59	$ 3,059.30
ABK	UROLOGY	0.6064	1	0.6064	$3,156.64	$ 3,156.64
ABK	UROLOGY	0.6708	2	1.3416	$6,983.75	$ 3,491.88
ABK	UROLOGY	0.7049	2	1.4098	$7,338.77	$ 3,669.39
ABK	UROLOGY	0.7085	1	0.7085	$3,688.13	$ 3,688.13
ABK	UROLOGY	0.7148	1	0.7148	$3,720.92	$ 3,720.92
ABK	UROLOGY	0.7741	3	2.3223	$12,088.83	$ 4,029.61
ABK	UROLOGY	0.7815	1	0.7815	$4,068.13	$ 4,068.13
ABK	UROLOGY	0.7945	2	1.589	$8,271.60	$ 4,135.80
ABK	UROLOGY	0.8025	2	1.605	$8,354.89	$ 4,177.45
ABK	UROLOGY	0.87	1	0.87	$4,528.82	$ 4,528.82
ABK	UROLOGY	0.9203	1	0.9203	$4,790.66	$ 4,790.66
ABK	UROLOGY	0.9884	2	1.9768	$10,290.31	$ 5,145.16
ABK	UROLOGY	0.992	1	0.992	$5,163.90	$ 5,163.90
ABK	UROLOGY	1.0485	3	3.1455	$16,374.03	$ 5,458.01
ABK	UROLOGY	1.0499	1	1.0499	$5,465.30	$ 5,465.30
ABK	UROLOGY	1.0603	1	1.0603	$5,519.43	$ 5,519.43
ABK	UROLOGY	1.0865	1	1.0865	$5,655.82	$ 5,655.82
ABK	UROLOGY	1.1844	2	2.3688	$12,330.88	$ 6,165.44
ABK	UROLOGY	1.1954	1	1.1954	$6,222.70	$ 6,222.70
ABK	UROLOGY	1.2033	2	2.4066	$12,527.65	$ 6,263.83
ABK	UROLOGY	1.3531	4	5.4124	$28,174.46	$ 7,043.62
ABK	UROLOGY	1.4843	4	5.9372	$30,906.33	$ 7,726.58
ABK	UROLOGY	1.4899	3	4.4697	$23,267.20	$ 7,755.73
ABK	UROLOGY	1.5618	1	1.5618	$8,130.01	$ 8,130.01
ABK	UROLOGY	1.8074	1	1.8074	$9,408.49	$ 9,408.49
ABK	UROLOGY	2.5126	3	7.5378	$39,238.32	$ 13,079.44
ABK	UROLOGY	3.0138	1	3.0138	$15,688.46	$ 15,688.46
Total ABK 65+			**54**	**60.8452**	$316,732.12	
			RWP >-65	153.921		
			Total RWP	214.7662		
					At Avg	$ 4,907.65
	Total Expense	$ 2,198,603.00		$5,205.54		

Calculation of Individual Cost:
Vascular Surgery <65 Data for MAMC
Source: MEPRS and CEIS

MEPRS	Service	CMI	# Disp	RWP	Product $	Indiv $
ABN	VASCULAR SURGERY	0.5812	4	2.3248	$16,384.52	$ 4,096.13
ABN	VASCULAR SURGERY	0.7561	16	12.0976	$85,260.38	$ 5,328.77
ABN	VASCULAR SURGERY	0.8611	4	3.4444	$24,275.13	$ 6,068.78
ABN	VASCULAR SURGERY	0.9203	2	1.8406	$12,972.02	$ 6,486.01
ABN	VASCULAR SURGERY	0.9362	4	3.7448	$26,392.26	$ 6,598.07
ABN	VASCULAR SURGERY	0.992	2	1.984	$13,982.66	$ 6,991.33
ABN	VASCULAR SURGERY	1.0709	16	17.1344	$120,758.28	$ 7,547.39
ABN	VASCULAR SURGERY	1.143	4	4.572	$32,222.13	$ 8,055.53
ABN	VASCULAR SURGERY	1.4559	2	2.9118	$20,521.52	$ 10,260.76
ABN	VASCULAR SURGERY	1.5499	9	13.9491	$98,309.21	$ 10,923.25
ABN	VASCULAR SURGERY	1.5703	2	3.1406	$22,134.04	$ 11,067.02
ABN	VASCULAR SURGERY	1.6238	26	42.2188	$297,545.86	$ 11,444.07
ABN	VASCULAR SURGERY	1.651	15	24.765	$174,536.54	$ 11,635.77
ABN	VASCULAR SURGERY	1.9487	7	13.6409	$96,137.11	$ 13,733.87
ABN	VASCULAR SURGERY	2.1107	8	16.8856	$119,004.81	$ 14,875.60
ABN	VASCULAR SURGERY	2.3655	4	9.462	$66,685.43	$ 16,671.36
ABN	VASCULAR SURGERY	2.4797	2	4.9594	$34,952.41	$ 17,476.21
ABN	VASCULAR SURGERY	2.5572	2	5.1144	$36,044.81	$ 18,022.40
ABN	VASCULAR SURGERY	2.941	14	41.174	$290,182.41	$ 20,727.32
ABN	VASCULAR SURGERY	4.5611	6	27.3666	$192,871.86	$ 32,145.31
Total ABN			**149**	**252.7308**	$973,896.78	
			RWP <-65	503.2438		
			Total RWP	755.9746	At Avg	$ 6,536.22
	Total Expense	$ 2,105,736.00		$ 7,047.71		

Calculation of Individual Cost:
Vascular Surgery >65 Data for MAMC
Source: MEPRS and CEIS

MEPRS	Service	CMI	# Disp	RWP	Product $	Indiv $
ABN	VASCULAR SURGERY	0.4955	24	11.892	$83,811.37	$ 3,492.14
ABN	VASCULAR SURGERY	0.519	6	3.114	$21,946.57	$ 3,657.76
ABN	VASCULAR SURGERY	0.7561	4	3.0244	$21,315.09	$ 5,328.77
ABN	VASCULAR SURGERY	0.805	11	8.855	$62,407.47	$ 5,673.41
ABN	VASCULAR SURGERY	0.8178	4	3.2712	$23,054.47	$ 5,763.62
ABN	VASCULAR SURGERY	1.0709	6	6.4254	$45,284.36	$ 7,547.39
ABN	VASCULAR SURGERY	1.3875	5	6.9375	$48,893.49	$ 9,778.70
ABN	VASCULAR SURGERY	1.5499	3	4.6497	$32,769.74	$ 10,923.25
ABN	VASCULAR SURGERY	1.5703	7	10.9921	$77,469.13	$ 11,067.02
ABN	VASCULAR SURGERY	1.6238	42	68.1996	$480,651.00	$ 11,444.07
ABN	VASCULAR SURGERY	2.1107	2	4.2214	$29,751.20	$ 14,875.60
ABN	VASCULAR SURGERY	2.3106	6	13.8636	$97,706.63	$ 16,284.44
ABN	VASCULAR SURGERY	2.3655	7	16.5585	$116,699.51	$ 16,671.36
ABN	VASCULAR SURGERY	2.5572	4	10.2288	$72,089.62	$ 18,022.40
ABN	VASCULAR SURGERY	2.941	21	61.761	$435,273.62	$ 20,727.32
ABN	VASCULAR SURGERY	20.1302	5	100.651	$709,359.06	$ 141,871.81
ABN	VASCULAR SURGERY	27.8822	2	55.7644	$393,011.32	$ 196,505.66
ABN	VASCULAR SURGERY	3.078	1	3.078	$21,692.85	$ 21,692.85
ABN	VASCULAR SURGERY	4.1089	2	8.2178	$57,916.67	$ 28,958.34
ABN	VASCULAR SURGERY	4.5611	8	36.4888	$257,162.48	$ 32,145.31
Total ABN 65+			**170**	**438.1942**	$1,131,839.20	
			RWP >-65	252.7308		
			Total RWP	690.925		
					At Avg	$ 10,826.94
	Total Expense	$ 2,105,736.00		$ 7,047.71		

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Medicare LOE Estimate Model

Claims	Total Medicare OP Cost $	MEPRS IP Code	Service	MEPRS LP. $	CEIS Total Disp	MEPRS HCFA CMI	CEIS 65+ Disp	CEIS % 65+ Disp	Medicare IP RWP	Cost per Svc Disp	Medicare LP. Cost$	Medicare Costs
7,304	$4,104,662	AAAA	Int Med	$8,364,955	1,388	1.1078	722	52.02%	800	$6,041.03	$4,361,628	$
9,368	$137,997	AABA	Cardiology	$7,399,827	776	0.9089	336	43.30%	305	$9,535.99	$3,204,092	$
2,411	$1,402,572	AAEA	Endocrine	$80,526	96	1.1347	7	7.29%	8	$838.81	$6,872	$
8,526	$647,920	AAFA	Gastro/Ent	$76,055	112	1.0710	6	5.36%	6	$879.06	$4,074	
8,055	$440,979	AAGA	Hematology	$99,139	126	1.4582	4	3.17%	5	$786.82	$3,147	
5,545	$204,661	AAIA	Nephrology	$19,446	15	1.1919	5	33.33%	6	$1,296.40	$6,482	
6,519	$344,490	AAJA	Neurology	$628,322	56	0.8309	19	33.93%	18	$9,434.32	$179,252	
1,153	$362,117	AAKA	Oncology	$685,452	73	1.1024	24	32.88%	26	$9,389.75	$225,354	
$0	$28,481	AALA	Pulmonol	$655,072	136	1.8852	12	8.82%	20	$4,816.71	$57,800	
7,080	$881,432	AAMA	Rheumato	$34,746	15	0.8670	3	20.00%	3	$2,316.40	$6,949	
4,871	$953,472	AARA	Inf Disease	$67,859	18	1.2528	2	11.11%	3	$3,756.83	$7,518	
7,343	$410,773											
8,236	$564,539											
0,687	$215,652											
2,572	$56,606											
$0	$0											
7,679	$10,606,283	Medicine	SUBTOT	$18,031,299	2,811	1.1283	1,140	40.55%	1286	$8,414.56	$8,082,167	$1
9,138	$726,376	ABAA	GenSurg	$8,071,394	1,228	1.7628	365	29.70%	643	$6,567.44	$2,397,118	$
3,111	$352,895	ABBA	Cardio/Thor	$3,306,445	840	4.1290	307	36.55%	1268	$3,938.83	$1,209,158	$
1,079	$97,025	ABDA	NeuroSurg	$1,855,515	264	1.7131	22	8.33%	38	$7,028.47	$154,626	
4,550	$1,518,943	ABEA	Ophthalmol	$1,180,924	250	1.8357	86	32.69%	158	$4,542.02	$386,071	$
0,148	$583,328	ABFA	Oral Surg	$643,964	184	1.1391	2	1.09%	2	$3,499.80	$7,000	
9,486	$59,913	ABGA	ENT	$2,044,827	363	2.1853	57	15.70%	125	$5,632.58	$321,057	
1,241	$1,391,298	ABIA	Plastic	$397,806	50	1.4082	2	4.00%	3	$7,956.12	$15,912	$
5,153	$356,588	ABKA	Urology	$2,198,003	273	1.2374	101	37.00%	125	$6,053.49	$913,403	$
0,512	$25,002	ABNA	Vascular	$2,105,736	159	2.3096	79	49.69%	182	$13,243.62	$1,046,246	$
4,455	$5,115,459	Surgery		$21,807,004	3,972	1.9586	1,020	25.68%	2008	$6,020.71	$6,350,589	$1
0,562	$566,765	ACAA	GYN	$2,746,913	404	10.9681	45	11.14%	44	$6,799.29	$305,968	
$0	$0											
72,364	$330,069											
6,326	$919,855	OB/GYN		$2,746,913	404	0.9681	45	11.14%	44	$6,799.29	$305,968	
$0	$0											
$0	$0											
$0	$0											
$0	$0											
$0	$0											
07,455	$486,379	AEAA	Ortho	$3,937,521	643	1.6130	161	25.04%	260	$6,123.67	$985,911	
$0	$67,512	AEBA	Podiatry	$330,906	27	1.5775	7	25.93%	11	$12,255.74	$85,790	
$0	$57,514											
37,063	$162,293											
44,518	$786,698	ORTHO		$4,268,426	670	1.5693	168	25.07%	268	$6,370.79	$1,071,701	
91,324	$111,183	AFAA	Psych	$394,981	84	0.8763	10	11.90%	9	$4,702.15	$47,022	
$0	$62,009											
$0	$0											
42,976	$65,909											
85,693	$69,701											
$0	$0											
20,193	$338,802	Psych		$394,981	84	0.8763	10	11.90%	9	$4,702.15	$47,022	
742,845	$1,737,740	AGAA	FP	$1,302,726	370	0.9666	174	47.03%	168	$3,520.88	$612,833	
		AGBA	FP Surg	$69,582	18	0.7635	2	11.11%	2	$3,310.11	$6,620	
		AGEA	FP Gyn	$44,575	24	1.2021	1	4.17%	1	$1,857.29	$1,857	
742,845	$1,737,740	Fam Pract		$1,416,883	412	0.9775	177	42.96%	173	$3,414.78	$621,311	
772,577	$625,969											
$0	$0											
183,578	$172,649											
$0	$34,155											
$377	$42,284											
$0	$31,146											
$0	$6,458											
38,532	$1,312,971											
514,390	$2,959,206											
514,390	$2,959,206											
66,571	$73,233											
$0	$152,921											
66,571	$226,054											
5,136,700	$23,604,168	Grand Total		$48,695,506	8,003	1.2524	2,560	31.99%	3206	$6,079.86	$16,458,559	
											LOE =	
											Above LOE =	

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Medicare LOE Estimate Model

MEPRS OP Code	Clinic	MEPRS O.P. $	ADS Total Clinic Vis.	MEPRS AWU	ADS 65+ Visits	ADS % 65+ Visits	Medicare OP RWP	Cost per Clinic Visit	Medicare O.P. Cost$	Medicare OP Rx $	Total Medicare OP Cost $	MEPRS IP Code	Service	MEPRS I.P. $	CEIS Total Disp
BAA	Int. Med	$8,804,371	62,847	0.0468	16,042	25.53%	747.6	$140.09	$2,247,358	$1,857,304	$4,104,662	AAAA	Int Med	$8,364,955	1,388
BAB	Allergy	$666,303	9,048	0.0155	401	4.43%	8.2	$73.66	$29,619	$108,368	$137,987	AABA	Cardiology	$7,399,927	776
BAC	Cardiol	$1,838,950	15,700	0.0331	9,070	57.77%	300.2	$117.00	$1,061,161	$401,411	$1,462,572	AAEA	Endocrine	$80,526	66
BAFA	Endocrin	$673,030	7,482	0.0377	2,061	27.55%	77.7	$89.95	$185,394	$462,526	$647,920	AAFA	Gastro/Ent	$78,055	112
BAG	GastroEnt	$1,362,834	8,860	0.0424	2,197	24.80%	93.2	$156.09	$342,924	$98,055	$440,979	AAGA	Hematology	$99,139	126
BAH	Hematol	$308,625	1,431	0.0470	273	19.08%	12.8	$215.81	$58,916	$145,545	$204,461	AAIA	Nephrology	$19,446	15
BAJ	Nephrol	$954,653	3,879	0.0570	971	25.03%	55.3	$246.11	$238,971	$105,519	$344,490	AAJA	Neurology	$528,322	56
BAK	Neuro	$1,423,356	9,881	0.0366	1,048	10.61%	40.5	$144.05	$150,964	$211,153	$362,117	AAKA	Oncology	$585,452	73
BAL	Outpt Nutr	$325,687	11,409	0.0111	997	8.74%	11.1	$28.55	$28,461	$0	$28,461	AALA	Pulmonol	$655,072	136
BAM	Oncology	$1,466,240	10,998	0.0517	3,927	35.71%	203.0	$133.52	$524,352	$157,080	$681,432	AAMA	Rheumato	$34,746	15
BAN	Pulmonol	$1,474,852	10,187	0.0452	4,825	47.36%	218.1	$144.79	$698,601	$254,871	$953,472	AARA	Inf Disease	$67,859	18
BAO	Rheumato	$801,280	6,272	0.0401	1,808	28.64%	64.5	$127.76	$205,430	$205,343	$410,773				
BAP	Dermatol	$1,006,445	14,748	0.0247	2,730	18.51%	87.4	$68.24	$186,303	$388,236	$584,539				
BAQ	Infect Dis	$646,756	4,041	0.0314	1,037	25.66%	32.6	$160.04	$165,965	$49,687	$215,652				
BAR	Prev Med	$593,105	3,946	0.0326	398	7.81%	10.0	$150.31	$46,294	$12,572	$58,866				
BAS	Rad Thera	$1,234,145	5,002	0.0452	0	0.00%	0.0	$246.73	$0	$0	$0				
Medicine	SUBTOT	$23,892,812	185,729	0.0376	47,496	25.57%		$121.08	$6,370,713	$4,437,670	$10,808,383	Medicine	SUBTOT	$18,031,289	2,811
BBA	GenSurg	$4,076,433	12,231	0.0474	2,053	16.78%	97.3	$333.29	$684,238	$44,138	$728,376	ABAA	GenSurg	$6,071,364	1,226
BBB	Card/Thor	$661,088	1,465	0.052	753	51.40%	39.2	$451.24	$339,784	$13,111	$352,895	ABBA	Cardio/Thor	$3,308,445	840
BBC	NeuroSurg	$765,551	2,017	0.0528	195	9.67%	10.3	$379.47	$75,946	$21,079	$97,025	ABDA	NeuroSurg	$1,855,515	294
BBD	Ophthalm	$3,518,894	22,316	0.0319	8,777	39.33%	280.0	$157.73	$1,384,393	$134,550	$1,518,943	ABEA	Ophthalmol	$1,180,924	260
BBF	ENT	$3,092,194	13,909	0.0361	1,953	14.04%	70.5	$222.32	$434,183	$149,146	$583,329	ABFA	Oral Surg	$643,964	184
BBG	Plastic	$543,139	2,985	0.0462	266	9.28%	12.3	$189.58	$50,428	$8,485	$59,913	ABGA	ENT	$2,044,827	363
BBI	Urology	$3,304,248	19,981	0.0479	7,368	36.82%	362.9	$166.81	$1,243,817	$147,481	$1,391,298	ABIA	Plastic	$397,808	50
BBK	Vascular	$625,111	5,903	0.0563	2,457	41.62%	138.3	$139.76	$343,435	$15,153	$358,588	ABKA	Urology	$2,198,603	273
BBL	Pain	$61,846	1,976	0.04326	352	17.81%	15.2	$41.42	$14,580	$10,512	$25,092	ABNA	Vascular	$2,105,736	159
Surgery	SUBTOT	$16,788,482	81,983	0.0460	24,174	29.80%		$205.59	$4,570,804	$544,855	$5,115,458	Surgery		$21,807,004	3,822
BCB	Gyn	$3,967,891	30,971	0.0314	1,505	4.66%	47.3	$128.11	$192,803	$396,962	$589,765	ACAA	GYN	$2,746,913	404
BCC	OB	$3,466,301	42,465	0.0335	0	0.00%	0.0	$81.63	$0	$0	$0				
BCD	Breast	$204,513	124	0.0227	35	28.23%	0.8	$1,649.30	$57,725	$272,364	$330,089				
OB/GYN	SUBTOT	$7,638,485	73,560	0.0292	1,540	2.09%		$103.84	$250,529	$669,326	$919,855	OB/GYN		$2,746,913	404
BDA	Peds	$4,668,626	67,366	0.0228	0	0.00%	0.0	$69.28	$0	$0	$0				
BDB	Adolesc	$738,122	5,355	0.0186	0	0.00%	0.0	$137.84	$0	$0	$0				
BDC	Wellness	$1,073,438	13,772	0.0136	0	0.00%	0.0	$77.94	$0	$0	$0				
BDZ	Developm	$966,776	7,106	0.0474	0	0.00%	0.0	$136.33	$0	$0	$0				
Pediatrics	SUBTOT	$7,446,964	93,619	0.0256	0	0.00%		$79.57	$0	$0	$0				
BEA	Ortho	$4,110,630	18,370	0.0361	1,747	9.51%	93.1	$223.77	$390,924	$107,455	$498,379	AEAA	Ortho	$3,937,521	643
BEB	Cast	$793,000	9,667	0.0157	823	8.51%	12.9	$82.03	$67,512	$0	$67,512	AEBA	Podiatry	$330,905	27
BEE	Orthotics	$817,815	7,992	0.0237	744	9.31%	17.6	$77.30	$57,514	$0	$57,514				
BEF	Podiatry	$966,060	6,750	0.0205	954	14.13%	19.6	$131.27	$125,230	$37,063	$162,293				
ORTHO	SUBTOT	$6,407,505	42,779	0.024	4,268	9.98%		$149.78	$641,180	$144,518	$785,698	ORTHO		$4,268,426	670
BFA	Psychiatry	$629,593	4,837	0.0401	111	2.30%	4.5	$179.91	$19,859	$91,324	$111,183	AFAA	Psych	$394,981	84
BFB	Psychol	$826,067	6,159	0.0321	686	11.14%	22.0	$134.12	$92,009	$0	$92,009				
BFC	Child Guide	$12,101	832	0.0221	0	0.00%	0.0	$14.54	$0	$0	$0				
BFD	Mental Hlth	$993,575	7,676	0.0372	197	2.57%	7.3	$116.41	$22,933	$42,976	$65,908				
BFE	SWS	$2,599,959	29,562	0.0373	726	2.45%	27.1	$87.92	$63,808	$5,893	$69,701				
BFF	ADACP	$1,245,571	20,125	0.0316	0	0.00%	0.0	$61.89	$0	$0	$0				
Psych/SWS	SUBTOT	$6,406,866	69,911	0.0334	1,720	2.49%		$92.84	$198,608	$140,193	$338,802	Psych		$394,981	84
BGA	Fam Pract	$6,962,039	71,846	0.0289	10,267	14.29%	296.7	$96.90	$994,895	$742,845	$1,737,740	AGAA	FP	$1,302,726	370
												AGBA	FP Surg	$58,582	18
												AGEA	FP Gyn	$44,575	24
Fam Pract	SUBTOT	$6,962,039	71,846	0.0289	10,267	14.29%		$96.90	$994,895	$742,845	$1,737,740	Fam Pract		$1,405,883	412
BHA	Primary	$10,483,604	123,858	0.0291	632	0.51%	18.4	$84.48	$53,392	$772,577	$825,969				
BHB	Med Exam	$346,240	2,491	0.0276	0	0.00%	0.0	$138.99	$0	$0	$0				
BHC	Optometry	$720,852	15,615	0.0192	203	1.30%	3.9	$46.16	$9,371	$163,578	$172,949				
BHD	Audiology	$629,945	19,993	0.0166	1,064	5.42%	18.0	$31.51	$34,155	$0	$34,155				
BHE	Speech	$184,883	2,191	0.0214	557	25.42%	11.9	$75.25	$41,917	$377	$42,294				
BHF	Cmty Hlth	$1,025,512	16,113	0.0245	459	3.04%	11.2	$67.86	$31,146	$0	$31,146				
BHG	Occ Hlth	$902,538	9,221	0.024	60	0.65%	1.4	$107.64	$6,458	$0	$6,458				
Prime Care	SUBTOT	$14,343,574	188,482	0.0232	2,995	1.59%		$76.10	$176,439	$936,532	$1,112,971				
BIA	ER	$9,148,222	80,177	0.0432	16,082	20.72%	694.7	$152.02	$2,444,816	$514,390	$2,959,206				
Em Svc	SUBTOT	$9,148,222	80,177	0.0432	16,082	20.72%		$152.02	$2,444,816	$514,390	$2,959,206				
BLA	Phy Thera	$1,815,844	30,299	0.0107	1,250	4.13%	13.4	$53.33	$66,662	$6,571	$73,233				
BLB	Occ Thera	$681,154	10,519	0.0148	2,360	22.44%	34.5	$64.75	$152,821	$0	$152,821				
PT & OT	SUBTOT	$2,496,998	40,818	0.01265	3,610	8.84%		$58.27	$219,483	$6,571	$226,054				
Out Patient	Grand Total	$101,045,027	907,684	0.0304	112,151	12.36%		$111.32	$15,667,468	$8,136,700	$23,804,168	Grand Total		$48,695,508	8,003

Sources: MEPRS, CHCS/ADS, CEIS

Madigan Army Medical Center
Medicare LOE Estimate Model
Analysis of Results

93% AAPCC Medicare Part A for MAMC	93% AAPCC Medicare Part B for MAMC	Total Potential Reimbursement Per Enrollee	Projected TSP Enrollees for FY99	Potential Total Medicare Revenue
$220.75	$164.03	$384.79	3,703	$1,424,868.11
Potential Total Medicare Revenue	**Total Medicare Costs $ Over the LOE**	**Medicare Profit/(Loss) to MAMC**	**Total Medicare OP Pharmacy Costs $**	**Total Medicare Profit/(Loss) to MAMC**
$1,424,868.11	($5,873,694.19)	($4,448,826.08)	($8,136,700.00)	**($12,585,526.08)**

Definitions and Acronyms

Definitions:

Ambulatory Weighted Unit (AWU) - a resource intensity factor for each different outpatient clinical service; standardized by DOD(HA).

Case Weight (CW) - the measure of the complexity of a caseload for a particular DRG.

Clinic Department - major organizational divisions of a medical treatment facility (i.e. Surgery, Medicine, OB/GYN, Ortho, Primary Care).

Clinic Service (Clin_A...G, I, K & N) - functional divisions within a Clinic Department of an MTF (i.e. Cardio/Vascular, Oral Surgery, Neurosurgery) and/or category of surgery that took place; (binary data coded 1 if visit took place in that clinic, otherwise 0).

Diagnostic Related Group (DRG) - a written description of a particular procedure of care.

Dual-eligible beneficiary – a beneficiary that is eligible for Medicare benefits (reached the age of 65 and enrolled in Part A and B), and retired from the military after serving for at least 20 years. Also applies to family members (usually a spouse that has reached 65).

Health Affairs (HA) – the governing body for all of military medicine. This subdivision of the Department of Defense is headed by an Assistant Secretary of Defense.

Individual Patient Cost (Pt_$) - the cost of treating a patient in a particular clinic. (A continuous variable measured in dollars).

Military Treatment Facility (MTFs) – an acronym for any military medical facility. Applies to a free-standing clinic, small hospital, or medical center.

Network – civilian medical services available to TRICARE beneficiaries at reduced cost. Network of providers established and administered by managed care support contractor. Office of the Lead Agent oversees this function to ensure adequacy. My provide care the MTF cannot.

Office of the Lead Agent – a separate department in each region that has oversight of all medical functions and advises the designated senior medical officer (usually at least a brigadier general) on all medical matters. Composed of several operations that include utilization management, quality management, health care, beneficiary services, contracting, and plans.

Patient Category (Pt_Cat) - status of patient seen; (binary data coded 1 if Medicare, 0 otherwise).

Relative Weighted Product (RWP) - aggregate workload & resource allocation measure for direct care.

TRICARE – world-wide military medical program for active duty, retirees, and family members. Consists of TRICARE Standard (fee-for-service), TRICARE Prime (HMO), and TRICARE Senior Prime (Medicare at-risk HMO) programs.

TRICARE Management Activity – a subordinate activity to HA. Manages all TRICARE activities on the national level.

TRICARE Northwest – name of the TRICARE program in the northwest (Washington, Oregon, and Idaho). Includes all TRICARE activities (MTFs and network) and the Office of the Lead Agent.

Acronyms:

AAPCC - Average Annual Per Capita Cost

BBA - Balanced Budget Agreement of 1997

CBO - Congressional Budget Office

CHAMPUS - Civilian Health and Medical Program of the Uniformed Services

CMP - Competitive Medical Plan

DHHS - Department of Health and Human Services

DHP - Defense Health Program

DOD - Department of Defense

DRG - Diagnostic Related Groups

EBC - Enrollment Based Capitation

EMIC - Emergency Maternal and Infant Care Program

ESRD - End-Stage Renal Disease

FEHBP - Federal Employees Health Benefit Plan

GAO - General Accounting Office

HCFA - Health Care Financing Administration

HMO - Health Maintenance Organization

IDS - Integrated Delivery System

LOE - Level of Effort

MAMC - Madigan Army Medical Center

MCCU - Medical Care Composite Unit

MTF - (military) Medical Treatment Facility

OASD(HA) - Office of the Assistant Secretary of Defense for Health Affairs

OBRA - Omnibus Budget Reconciliation Acts of 1985, 1987 and 1990

POM - Program Objective Memorandum

PPO - Preferred Provider Organization

PSO - Provider Sponsored Organization

TEFRA - Tax Equity and Fiscal Responsibility Act of 1982

TRICARE - The DOD's system-wide managed care initiative.

TROA - The Retired Officers Association

TSP - TRICARE Senior Prime

UM - Utilization Management

USPCC - United States Per Capita Costs